

COUNTRY GUIDE

THE FARM MAGAZINE

V. 83
#6

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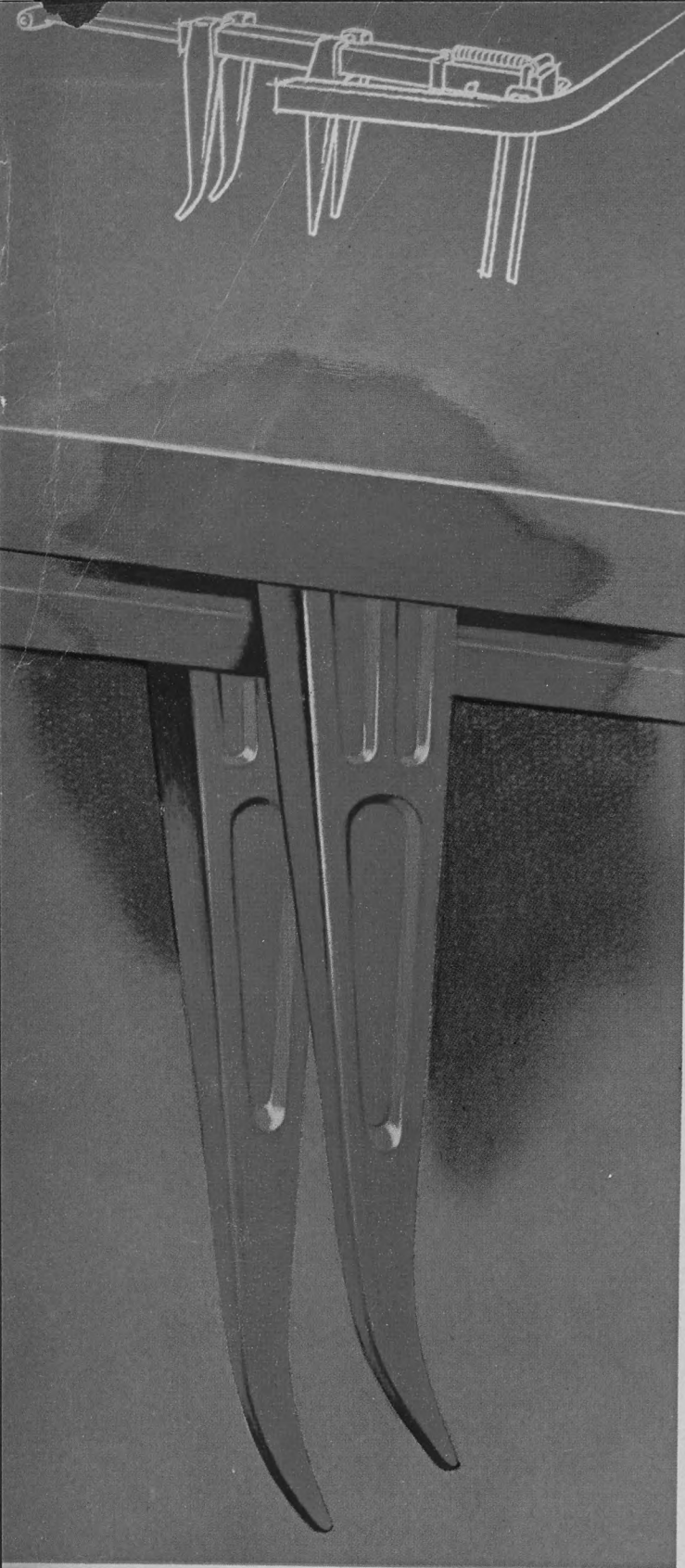
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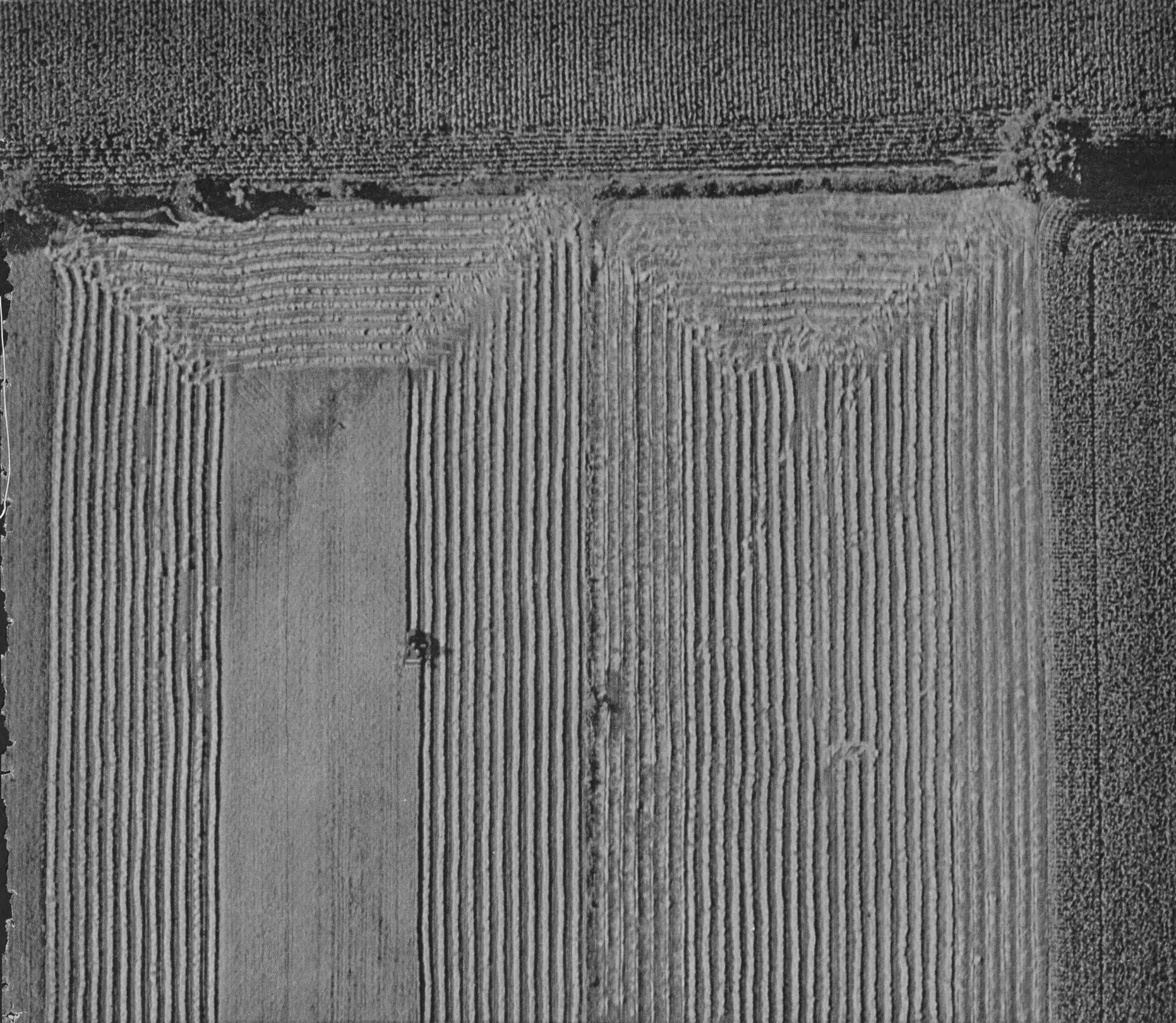
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Letters

March Cover Misbranded

On the cover of your March 1964 issue of the Country Guide you show a picture painted by Bert Smith which is entitled "Fording the Highwood." In your note on the cover you say "Cattle carrying the I brand ford the Highwood River in Alberta . . ." I wish to bring to your attention that these cattle are not carrying the "I" brand at all but are carrying the "T" brand (connected TL) which is now registered in Mr. Melvin Nelson's name. This is one of the few mistakes I have noticed in your very informative monthly farm magazine but I thought that it should be brought to your attention. Thank you very much.

LEONARD J. RING,
High River, Alta.

(We thank Mr. Ring for drawing this error to our attention.—Ed.)

Old-Timer Reflects

It's odds-on this will be our last subscription to the Guide. We're both now well over the allotted span, the last two of six immigrants (a father, two sisters, and three brothers) who crossed from England to Canada in 1910 and never regretted it.

We took in the provinces, even Newfie, and some of the states, and settled in the finest of them all! We

rode the cow-ponies; traveled in the covered wagon; and met the "Grain Growers' Guide" in the new Golden West, in the days of E. J. Garland and Mr. Partridge, and when Sam Larcombe was busy with his new flowers, fruits and plants, and E. C. Chipman was telling how to grow orchards on the prairies.

We hauled water to the big "steamers" dragging 12 plows; fired the old straw burners; turned for hours on the flywheels of the first one-lung gas tractors; and we broke rich new prairie where the cities are now spreading. We threshed bumper grain crops in the crisp, fall days, when it was a joy to run new, clean No. 1 wheat through the fingers as it poured down the spout; hauled it with 4-horse teams to the new branch lines, now being so wantonly abandoned; listened to the wheels of the empty wagons return screaming over the frosty snow.

We took in the two wars; fought prairie fires, and bush fires too; sailed the little B.C. lakes in the paddle-wheeler "Kokanee"; and rode down the canyons to ride the "Princess boats" on the Pacific; cut the big Douglas fir; and, a year ago, went "jet," Calgary — Toronto — London, in 12 hours.

We always had the "Guide," even in the days of the Campbell Amendment, and the Wheat Pool . . . and when its pages were bordered with the names of the great horse breeders and purebred cattle ads; when spring brought out column on column of offers of purebred

stock from famous poultry breeders; and when its pages were given to describing multiple horse-hitches, from 6 to 16. In the fall there were pickle recipes, and ideas on how to cure meat, and cook for threshing crews, and tips on bread-making and canning. Both the "Guide" and the West were best in their young days.

It's been a great life in a wonderful country, and mostly, the "Guide" has been in the mail—often in the bundle dropped off by a neighbor on his return from a trip to town.

The picture on the cover of the March issue is in old familiar country . . . but you Easterners . . . that's not an I brand—that's TL.

So, send along the "Guide"; we like to see it in the mail. Wishing you, and "The Grain Growers' Guide" long life and straight furrows.

W.H.,
Sundre, Alta.

Among the Missing

How pleased I was to see the article—"A Dress Unknown." It is so true! I spent hours looking for a dress just last week and came home worn out and discouraged. I am an exact 17 — but there aren't any of this size to be had! On the other hand a well-tailored 16 will fit if one can find such a garment.

So I say — "Good work, Country Guide!"

Mrs. B.G.,
Port Hope, Ont.

Tobacco Pays the Bills

In reply to a letter from H.H., Langdon, Alta., in the March issue concerning tobacco, I would like to put my two cents worth in. I wonder if this so conscientious person knows that without actually putting his hands on one leaf of tobacco or spending a penny, the government collected \$420,000,000 in 1963 from tobacco. It ranks second highest, the first being liquor. Next I wonder how much land tax and income tax H.H. is paying? Does it compare to a first class tobacco farm?

As for it not being essential to agriculture, I can say only that a tobacco farmer grows his crop in land that otherwise would be wasteland as it is light, sandy soil not quite suitable for other crops. So we are not taking land that might be used for something else. As for the Department of Health, some of its spending money could be coming from this non-essential crop. Our Health Minister is certainly trying to kill the goose that lays the golden eggs.

I also wonder if H.H. has ever worked the year around, as a tobacco farmer does? He works with his wife from light to dark in the fields and then the farm wife still runs her home, raises a family and cooks for any hired help they have. As for H.H. (male or female) you have a very biased view toward something to which you have never contributed a cent.

Mrs. M.R.,
Angus, Ont.

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across
Canada
choose
MIRACLE

ALBERTA:



Horses are a hobby with Walter Hutchison—his business is beef. But they come in handy working cattle on 9,000 acres of range land near Medicine Hat, Alta.

Walter Hutchison keeps 40 purebred and 120 commercial cows. He also feeds out 80 yearlings annually—heifers to 900 lbs., and steers to 1,000 lbs. He uses "Miracle" Feeds both on range and in the feed lot. "Miracle" is his choice of feed for one very good reason—profit. It's a good choice, too, because last year Walter Hutchison's cattle topped the sale at Medicine Hat.



COUNTRY GUIDE

Vol. 83, No. 6 — JUNE 1964

THE FARM MAGAZINE

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Home and Family Section:

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GWEN LESLIE

In This Issue



[Sask. Gov't photo]

Canwood Park is one of 30 rural parks in Saskatchewan provided by provincial and local governments and local groups. It's a sign of the times, as farmers join city folks in finding more spare time, and a way to enjoy it as well.

These parks provide a place to picnic, swim, water ski, fish, or simply to relax. They are being developed as the farmer's answer to Mother Nature, who overlooked such things

as lakes and trees in some areas, when she was fashioning the wheat province. The story of these parks begins on page 22.

Farmers can provide a place for recreation right at their doorstep too and Peter Lewington tells in this issue how farm ponds can provide fishing, swimming, fire-protection and a host of other benefits. On page 47, Elva Fletcher describes what one Alberta community did to provide more summer recreation for its people.

For farmers who are joining thousands of other Canadians as owners of power boats, and who want to try the thrills of water skiing, a picture story on page 18 shows how to do it. It is not as difficult as you might think. V

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COVER: The workshop is out-of-doors in this photo by Dirk Brouwer, North Battleford, Sask.

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10' cutter bar, 7' pickup, cylinder width—32", straw walker area—4,000 square inches, sieve area—1,884 square inches.

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7' cutter bar, 6' pickup, cylinder width—32", straw walker area—3,264 square inches, sieve area—1,750 square inches.

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Editorials

Where Now in Hog Marketing?

SURPRISE — almost stunned disbelief — was the reaction of many people across the prairies to the defeat at the polls of the proposed Saskatchewan hog marketing board. Despite an intensive publicity and propaganda campaign to promote the board — in fact one of the most intensive that this country's agriculture has ever seen — hog producers in Saskatchewan turned it down.

This was no defeat by default. Those hogmen who voted are ones who produced 80 per cent of the province's hogs. It was a massive expression of their opinion and while 4,177 of them voted in favor of the plan, 4,179 voted against it, in virtually an even split. This plebiscite required a 60 per cent "yes" vote for approval. Even that majority would have been little enough, because any marketing board to be successful must have overwhelming producer support.

Why did hogmen turn it down? This was an issue that had deep meaning to them and it claimed their intense interest last winter. But after the Farmers Unions in the three provinces had devoted virtually their entire resources during the winter presenting their plans for compulsory producer marketing boards; after other organizations too had expended their energies and resources in campaigns either supporting or opposing the marketing board proposals — the hogmen turned thumbs down! Why?

Certainly not because they are satisfied with the present marketing system. Many farm organizations and farmers who fought against the proposed board were quick to admit that there are weaknesses and abuses in the present marketing system. However, they didn't like the marketing board proposals that were being presented to them.

And no wonder! For if ever a proposal was badly developed and presented to farmers, this one was. The educational features of the publicity campaign were virtually invisible. At times, the marketing aspects of it seemed to get lost, as its promoters retreated to the old cries of class warfare — of trying to turn farm people against "big business." It was suggested that the main purpose of the board was to end vertical integration, when in fact its purpose must be to help build a stronger swine industry.

During the campaign, representatives of the Ontario Hog Marketing Board were brought to the prairies and some of them subjected their audience to the same obsolete propaganda — get in there and fight the old fight against big business. No wonder hog producers in Saskatchewan were confused. They could hardly know that at least some of the Ontario spokesmen were among those who almost carried the Ontario hog plan to disaster before cooler heads stepped in and saved the plan, turning it into a sound marketing system.

One lesson of the Saskatchewan experience is that farmers are no longer prepared to accept as their rallying cry this fight against business and other groups in society. Too much is at stake today. An industry is composed of its parts. Farmers are looking for a positive approach. They are searching for ways to look after their own interests but they are not unprepared to co-operate with other interests in their industry, so long as their own interests are not sacrificed.

And so, with the hog board voted down in Saskatchewan; with Alberta unlikely to proceed further with a proposed board; a winter's efforts, and a chance to deal with the hog industry's marketing problems, could be lost.

This, however, may not be the case. Manitoba is trying a different approach. Instead of hastily throwing the issue into the public arena last fall, the Manitoba government declared itself against a vote at the present time. Instead, it adopted the recommendations of its Shewman Commission (Country Guide, March 1964) and is now devising a voluntary teletype marketing scheme.

Under the direction of Minister of Agriculture, Hon. George Hutton, the new system is being carefully and deliberately planned. Representatives of every interested segment of the swine industry have been called into the discussion. Producers, farm groups, co-operatives, processors, and others are all contributing to the planning of a new marketing system designed to serve the best interests of the industry.

The plan is being designed to streamline the marketing process for hogs; to clear up marketing abuses such as under-the-table payments; to provide a system whereby supply and demand are able to reflect themselves clearly in the prices established. What is wanted is an efficient marketing system—one that serves the interests of both farmers and processors.

Time alone will tell how successful the government's efforts will be. There is no denying the determination of Mr. Hutton. He has already stated that every hog going to market will help pay for the teletype system, whether the producer uses it or not.

Mr. Hutton has promised to have the new marketing system in operation this fall or winter. Producers will have the opportunity to vote on it within a couple of years of the time it is initiated.

If the new plan proves to be successful, it will represent a great step forward not only for Manitoba's swine industry, but for agricultural marketing in this country. Undoubtedly producers in the other two prairie provinces will look at it closely and possibly move in the same direction.

If the Manitoba approach does not succeed, then it is likely that agitation from farm people for a remedy to their marketing problems will continue. Prairie hog producers will continue to fight the battle of marketing, while producers in other regions of North America will continue to surge ahead in building stronger, more competitive swine industries. V

A Place in the Sun!

THERE IS A QUESTION facing every farmer who wants a measure of prosperity — who wants to find his place in the sun. He must ask himself — is this place in the sun a God-given right, or is it a prize which I must win? If it is a prize to be won, is the responsibility that of the individual or does it belong to organized agriculture?

One Ontario extension worker stated recently: "Agriculture is not a healthy business unless 10 per cent of farmers are going broke." This is not the stuff of which popularity is made, but a U.S. Congressman offered a similar viewpoint in an address to the National Institute of Animal Agriculture. "We cannot guarantee a good living to everyone who wants to farm, and still maintain a healthy competitive agriculture. Do we do the inefficient farmer any favors by keeping him on the land with the lure of legislative magic? Is he not better off making the necessary adjustments at the earliest possible date?"

There is much evidence that price and production controls ultimately hurt the people they set out to help. For instance, there is the widespread harm that the daily urban

press does to agriculture through its colored and distorted reports of farm legislation. The city press depicts the farmer, not as a rugged individualist, but as the indigent recipient of handouts. Meanwhile, the political strength of the farmer's voice continues to shrink. The drift of farmers from the land is outstripping even the sober forecasts of the Gordon Commission. The shifts in both federal and provincial parliaments is from rural to urban representation.

Farmers themselves are all painfully aware that legislation notwithstanding, agriculture is still a rugged occupation. The tobacco grower with a large mortgage to pay off, and poor market prospects for his crop, lives with that fact every day. So does the broiler grower and the egg producer, as well as the cash crop grower whose canning market has closed its doors. For the beef producer, there is somber news of increasing competition from Australia where producers are now contributing some \$4 million annually to promote new markets.

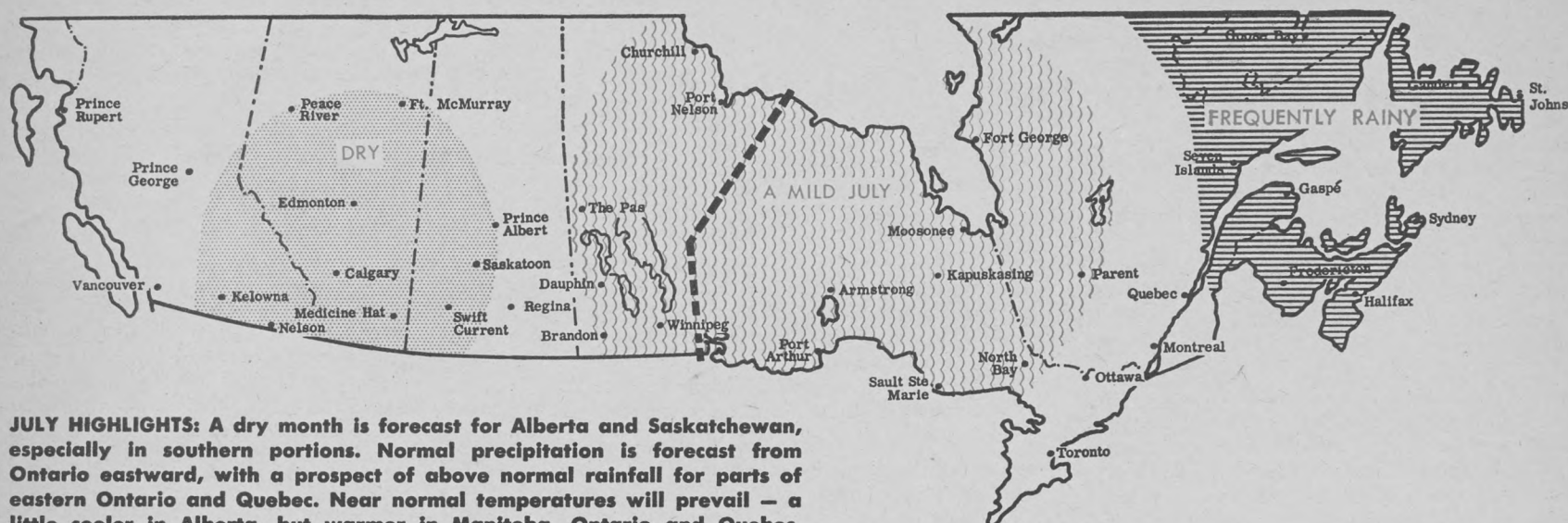
But there is another side to the story. There are many indications that the Canadian farmer's will to shape his own destiny is daily being strengthened. Ontario's hog producers have already voted for the expenditure of their own funds for research which they believe is needed. A similar spirit pervaded the National Hog Conference held recently in Montreal.

Milk and apple producers are conscious of the requirements of public relations and product promotion; and there are indications that the Poultry Products Institute will get the producer support it so desperately needs for its excellent work.

Individually, more farmers are doing some modest research on their own farms. Collectively, their thirst for information from extension workers is unprecedented, and this is leading to demands for more research work that is of direct use to them.

But progress has its own hazards. The mass production methods being applied today by poultry and cattle and hog producers, and by cash crop growers, is shortening production cycles. It is inherent in this new kind of agriculture that depressed prices can last for prolonged periods. The beef industry is a case in point. The feedlot industry has become specialized. Now, when prices are low, these specialists, with a big investment in their feedlots, hesitate to cut back their operations. But if they continue to feed, prices stay down.

If there is to be a place in the sun for farmers, it will be increasingly dependent upon the balance achieved between production and marketing. Whether production is controlled by legislation or by producer restraint is the unresolved dilemma facing agriculture. V



JULY HIGHLIGHTS: A dry month is forecast for Alberta and Saskatchewan, especially in southern portions. Normal precipitation is forecast from Ontario eastward, with a prospect of above normal rainfall for parts of eastern Ontario and Quebec. Near normal temperatures will prevail — a little cooler in Alberta, but warmer in Manitoba, Ontario and Quebec.

JULY 1964

(Allow a day or two either way in using this forecast. It should be 75 per cent right for your area, but not necessarily for your farm.—Ed.)

Alberta

- 1st week 1-4:** Fair, dry weather will predominate, with highest temperatures occurring the last couple of days.
- 2nd week 5-11:** Showers threaten on 5th; scattered showers and thunderstorms near the 7th. Brief cooling (40s) will follow. Week-end showers in north.
- 3rd week 12-18:** Cool at the beginning, with some warming likely by 14th. More cool air will move southward from Yukon around 17th. No important precipitation.
- 4th week 19-25:** Rain and thunderstorms forecast between 22nd and 24th promise month's best precipitation (over ¾"). Warm early in week, cooler in unsettled period.
- 5th week 26-31:** Expect 80-90 temperatures early in week, followed by cooler conditions. Moisture will be light; showers threaten around 28th, and in north on 31st.

Saskatchewan

- 1st week 1-4:** Early rain likely in eastern Saskatchewan. Cool throughout province, warming toward week end.
- 2nd week 5-11:** Showers and thunderstorms will benefit southern sections most — heaviest (over ½") near the U.S. border. Cool around 9th-10th, otherwise seasonable.
- 3rd week 12-18:** Slightly cooler weather will follow general showers early in the week. Warmer toward the end of the week with readings in the 80s and 90s.
- 4th week 19-25:** Warm weather will give way to cool, unsettled conditions. Frequent showers between 22nd and 25th, with rainfall over ¾" in many locations.
- 5th week 26-31:** The trend will once again be toward storm-free weather during this period. Predominantly warm days are due beginning near the 27th.

Manitoba

- 1st week 1-4:** Locally heavy showers and thunderstorms possible. Brief cooling is likely on the 2nd.
- 2nd week 5-11:** Main moisture expected around the 8th-9th; threatening in some sections near the 6th. First half of the week will be mostly warm; cooler near 9th-10th.
- 3rd week 12-18:** This will be one of the drier intervals of the month with a chance of moisture around the 12th. Warmest weather (80s) due toward the week end.
- 4th week 19-25:** Widely scattered showers on the 20th, followed by cooler weather. More general showers between the 23rd and 25th. Most days in 60s-70s; nights in 40s.
- 5th week 26-31:** Sunny weather will predominate during this period, with daytime temperatures generally above seasonal normals—80s, occasionally low 90s.

Ontario

- 1st week 1-4:** General storminess (over 1" rain) at beginning; threatening around 4th. Seasonable temperatures.
- 2nd week 5-11:** Several cool days are likely this week, particularly during first half. Rain and thunderstorms fairly general around the 9th-10th. Locally heavy rains likely.
- 3rd week 12-18:** Temperatures in the 80s forecast for first half. Windy, showery weather developing around 15th-16th. More warm weather at end of interval.
- 4th week 19-25:** Cooler (40s) on 21st. Many threatening days are indicated. Scattered showers on 20th confined to north. General moisture likely around 22nd, 24th.
- 5th week 26-31:** Eastern region will receive some moisture around the 28th, otherwise it will be fair. Several warm days are expected during this interval.

Quebec

- 1st week 1-4:** Over 1" rain expected around 1st and 2nd. Cool during rainy period, otherwise seasonable.
- 2nd week 5-11:** Threatening on 5th and 7th, but the main storm activity will likely center around the 10th. Cooler conditions are in prospect near the 8th-9th.
- 3rd week 12-18:** Temperatures will rise early in the week with warm weather due between the 13th and 15th. General showers, thunderstorms forecast around 15th-16th.
- 4th week 19-25:** More wet weather is expected. Frequent showers likely between 21st and 24th. Warm at the beginning of the week, cooling toward the week end.
- 5th week 26-31:** Widespread showers and thunderstorms are in the offing between the 28th and 30th. Warmest (70s) weather is due at the beginning of the week.

Atlantic Provinces

- 1st week 1-4:** This will be a wet interval with frequent rains, especially between 1st and 3rd.
- 2nd week 5-11:** Rainy weather will continue into early part of this week, followed by cooler, drier conditions. More showers and thunderstorms near the 11th.
- 3rd week 12-18:** The warmest (70s) weather during this interval is forecast for the middle of the week. Showers and thunderstorms will develop at mid-week.
- 4th week 19-25:** Warm, sunny weather for first half. Strong winds and thunderstorms will sweep Atlantic Provinces around 23rd-24th, followed by cooler weather (60s).
- 5th week 26-31:** A couple of warm days are likely around the 27th-28th. This interval will be generally dry, but some rain is expected to develop around the 30th.

Key to Abbreviations: T, temperature; P, precipitation; CL, cooler; WM, warmer; TH, threatening; SH, showers; R-S, rain or snow.

Britain Today—A Changing Market for Farm Produce

by NORMAN GOODLAND

British agricultural writer

THE BRITISH agricultural market is "filled to capacity." What does this mean? It means that, generally speaking, farm produce offered to Britain tends to be in a state of oversupply. True, vigorous advertising campaigns, both by home and overseas suppliers, may "up" sales in Britain for particular commodities — but the fact that this becomes necessary is in itself an indication that the limit is being reached.

Since the war, the British farmer himself has played a very large part in creating this state of oversupply. He has not, of course, been the only one committed to it. As we all know, Britain relies mainly upon industrial exports for a living. Her sale of industrial production to agricultural exporting countries must, therefore, depend upon her ability to allocate a share of her own agricultural market to them; and this she has always done.

However, the position is now that no one supplying this market can expect to make much increase in profit, merely by endeavoring to sell more to it. Already, the British Government has embarked on a program of "commodity agreements" in agriculture with outside suppliers. It is, in fact, seeking to "rationalize" supplies from overseas, so that it can balance agricultural imports with similar "allocations" of production to its own farmers. The result to the British farmer thus becomes the same as that to the supplier from overseas — he must hold his own by cheapening his production methods, rather than by increasing his production.

The Price Review in Britain this year clearly bears this out. Cattle and sheep prices for the British farmer have been changed "so that market forces will have a greater influence on producers' marketing decisions."

The pig population is based on what is called the "middle band" of a flexible government guarantee for pigs, set at a level "which will reflect the quantities of pig meat which the market can absorb at reasonable prices." At present, this is 10½ to 11 million pigs; but the number is to be increased by ¾ million.

But many pig breeders hardly understand the workings of their own Price Review. One said to me, "I read everything that comes my way about the Price Review two or three times — without making top or tail of it. All I know is that above a certain point, if I produce more, I get less. I believe that point has now been raised a bit—thank God!"

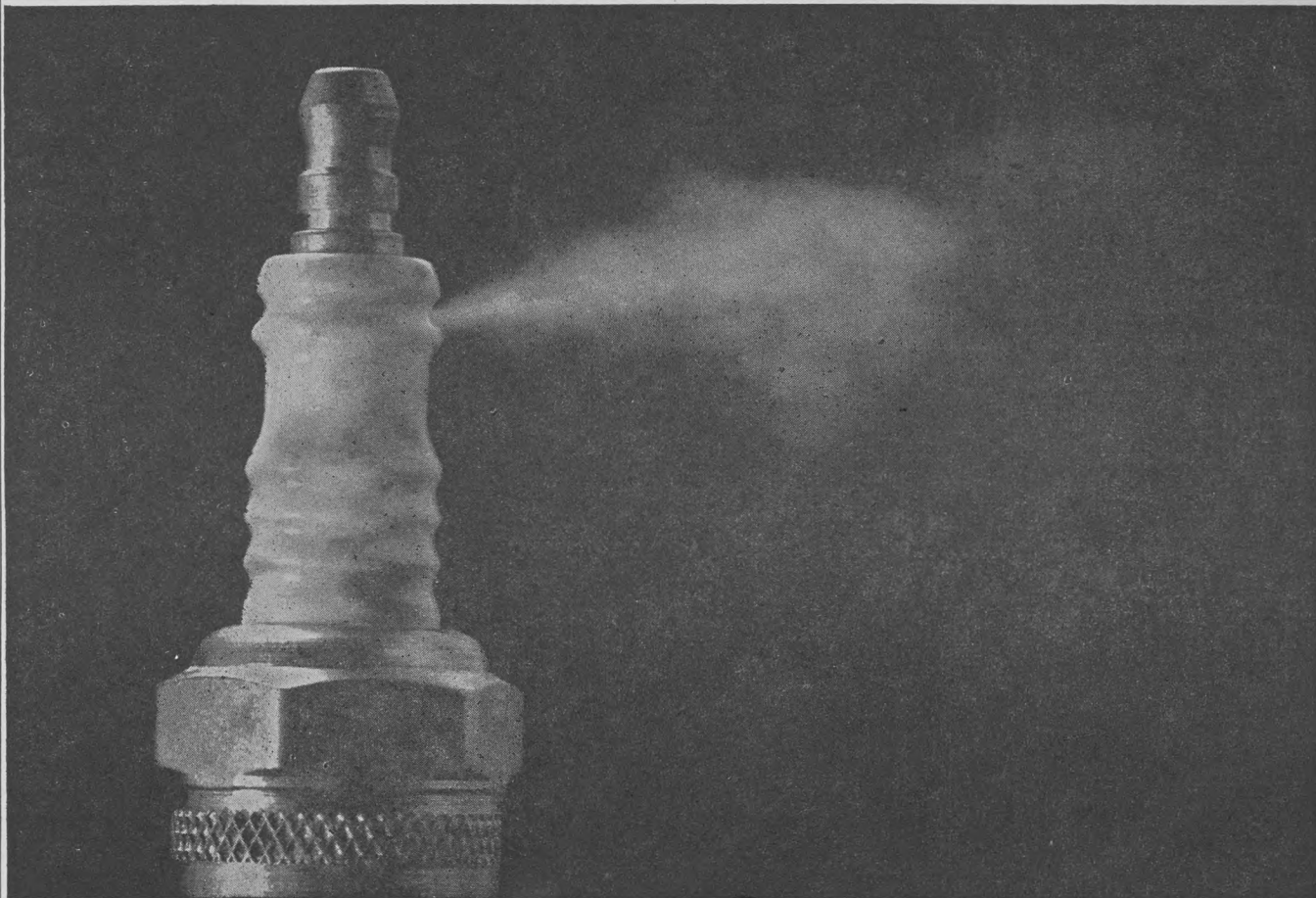
Cereals? From July 1, "minimum import prices" will operate. To British farmers, there are new guarantee arrangements for wheat and barley, based on "standard (production) quantities" and "indicator prices." If he produces more than the standard quantity, he gets less subsidy. The "indicator price" is tied in with the proposed minimum import price.

Dairying? This is also based on a "standard quantity" to the British cowkeeper, which has been raised by more than 30 million gallons. Why? Because during the last 10 years, 40,000 producers have left the industry, and there is now danger of a milk shortage for the manufacturers.

Except for the egg men, British farmers are satisfied that the best has been made of a bad job. This is a vast change in attitude from only a decade or less ago, when they were intent upon "squeezing the foreigner out." The White Paper speaks of "stability plans" to provide for domestic and overseas suppliers a "fair share" in a growing British market. This will involve a periodic assessment of balance between home production and imports.

But we must take facts as they are. "Stability plans"; the setting of "standard quantities" both to the

home farmer and overseas; and disincentives to "overproduction"; do not in themselves seem to be features of a "growing" market. There may be some expansion — but not enough, in this writer's view, to satisfy the ambitions of farmers here — or abroad. Those engaged in farming for the British agricultural market, especially those at home, will only be able to increase their fortunes by the large swallowing up the small. This is a process already underway in Britain, not only among farmers themselves, but among agricultural wholesalers and retailers.



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GUIDE POSTS

UP-TO-DATE
FARM MARKET
FORECASTS

PASTURE AND HAY outlook benefited from spring rains in Prairies and Central Provinces. Fodder prospects good for maintaining large cattle population at or above present levels.

FEEDER CATTLE have gone to country in large numbers, giving prospect of continuing heavy beef deliveries. Caution will pay feeder buyers in next few months as heavy deliveries of fed cattle hold prices down.

COW MARKETINGS will rise in next month or so and bring pressure on prices. Even so this seems a good year to cull cow herds and improve overall quality and efficiency of beef herds.

FED CATTLE price improvement in Canada is being restricted by ample supplies of good grade Canadian cattle and the threat of American imports should the Canadian price fail to stay in line with U.S. price.

WHEAT SALES to China and Europe assure continued heavy export until at least the end of 1964. It is still important for prairie farmers to deliver to country elevators as quotas open to assure availability of wheat for export commitments.

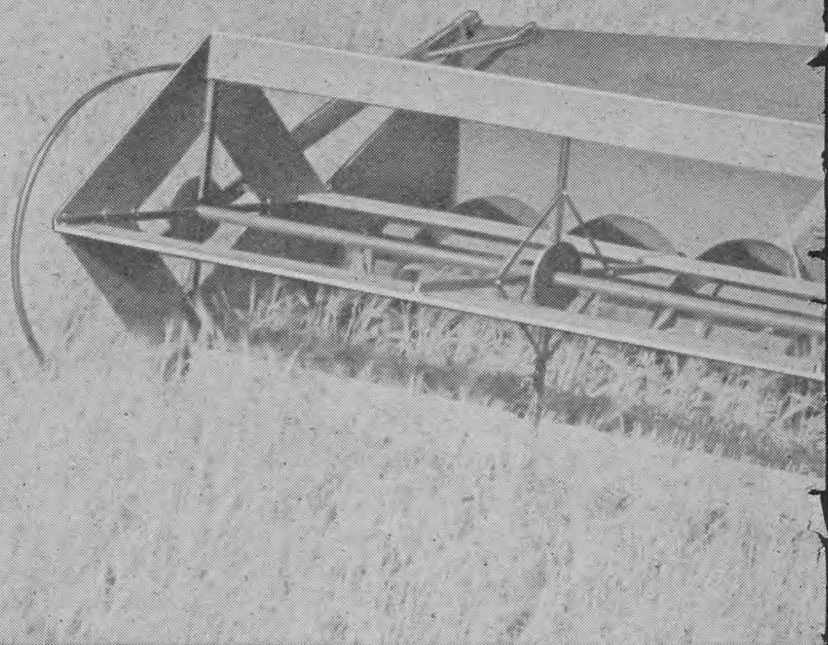
TURKEY PRICES, particularly for heavy birds, are continuing at higher level. At the same time, the hatch is down and fall turkey supplies will be smaller. Canadian turkey producers should not look for prices to improve or even to hold at present levels, since American production is up and imports from the U.S. will be a continuing threat to price.

SOYBEAN PRICE SUPPORTS in U.S. have been confirmed at the 1963 level and assure outlook for Canadian producers.

BROILER PRICES well below last year will continue for several months at least as heavy production continues. U.S. production also up and prices very low so no relief available across the line. Any improvement in Canadian broiler prices would invite U.S. imports.

HOG MARKETINGS during the summer will be down from weekly levels earlier in the year, but still should run 10 per cent above last summer. Degree of price improvement depends on the expected drop in U.S. hog marketings.

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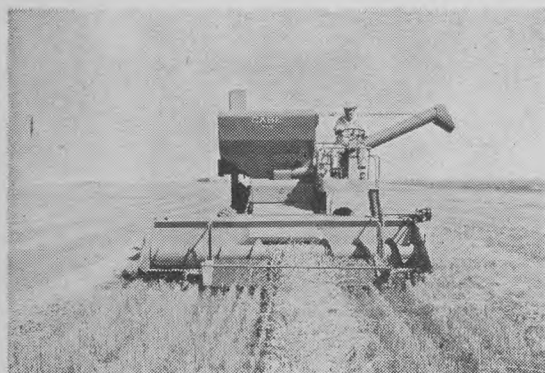
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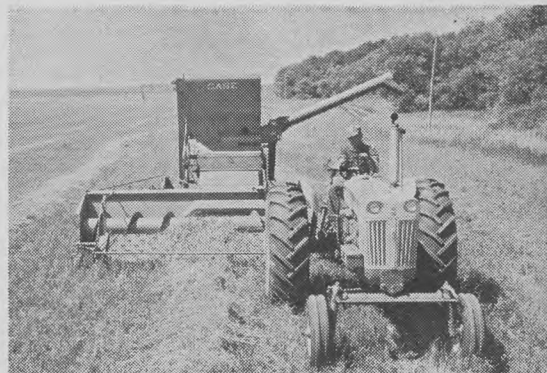
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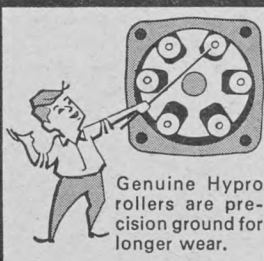


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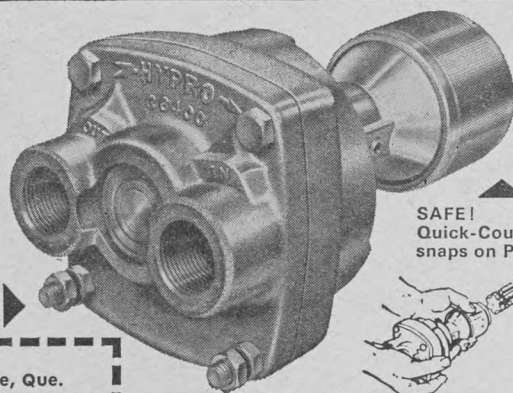
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News Highlights

Last year was a good one for agriculture. Dominion Bureau of Statistics reports that farm cash income reached an all time high of \$3,219 millions in 1963, up by 2.1 per cent from 1962. Farmers also received \$14.8 millions in the form of supplementary payments.

Tests at the Lethbridge Research Station which are being carried on this year have already showed that crosses of sorghum and Sudan grasses have considerable promise as hay and pasture crops. When planted in late June, these plants produce good hay or pasture before the season ends.

The market for foods continues to grow. Canada's population at April 1 totaled 19,180,000, an increase of 334,000 from a year ago. Ontario's increase, at 131,000, was the largest of any province.

Approval for development work on six cattle grazing reserves in Alberta, under terms of ARDA, has been announced jointly by Federal Forestry Minister Maurice Sauve and Agriculture Minister H. E. Strom of Alberta.

Crop prospects are bright on the prairies. General spring rains have greatly improved soil moisture conditions and have alleviated serious soil drifting in parts of Saskatchewan and Alberta.

The Ontario government has taken another step toward dealing with the serious water shortage in the southwest of the province. An engineering specialist in water resources has been appointed to assist farmers combat the water shortage. He will be located in London.

Australia hopes to harvest a record wheat crop this year. Officials there expect it to total more than 300 million bushels.

Poultrymen will be heading for London, Ont., on June 16, 17 and 18. These are the dates for the Seventh Annual Poultry Industry Conference and Exhibition to be held at the Western Fair Grounds there.

Canadian Holstein breeder Steven Roman found a pot of gold at the end of his rainbow. He dispersed his herd at Unionville, Ont., in an auction sale which grossed \$323,150. Average selling price for the 123 head was \$2,630. This is the second highest sale average ever made in Canada. Highest priced animal was a bull which sold for \$37,000.

Saskatchewan Hog Producers turned thumbs-down on a proposed hog marketing board. The vote was just about an even split—4,177 voted in favor of the proposed board, 4,179 against. Most large producers went to the polls while small producers apparently stayed at home. Those who voted market 80 per cent of all of the hogs produced in Saskatchewan.

In announcing that a vote will be held on a proposed egg and fowl marketing plan for Ontario, the

province's Minister of Agriculture, Hon. W. A. Stewart, stated there has been insufficient indication of support from producers to warrant the adoption of a marketing plan without a vote. "Attendance at various meetings held to discuss the proposal was too meager," he stated. As a result, the vote will be held June 22 to 26 inclusive. Aims and objectives of the proposed marketing plan provide for the promotion and advertising of eggs and fowl; provision for research for marketing and the establishment of an egg industry advisory committee; a study of the terms, conditions, agreements, charges and costs relating to the production and marketing of eggs; and finally the setting up of the necessary machinery to finance the program by means of a 2 cents license fee on fowl.

The tempo of mechanization continues to increase. DBS reports that farm implement and equipment sales increased by 24.5 per cent in Canada during the first 3 months of 1964 as compared to the previous year.

Manitoba's new voluntary tele-type hog marketing system which is scheduled to go into effect this fall is being carefully planned. Agriculture Minister Hon. George Hutton has called in experienced producers as well as representatives of producer and processing organizations, to help plan the physical requirements and operating procedures for the system.

Manitoba's Interlake and West Lake region farmers who are clearing land with a bulldozer and brush-cutter attachment, or with a ball and chain, can now get government assistance. The provincial policy provides assistance of 25 per cent of the bush clearing costs up to \$2 per acre.

A further sales contract under the provisions of the second long term Wheat Agreement with China has been signed. This brings total sales under the Agreement to 77.4 million bushels.

The butter surplus is disappearing. The Agricultural Stabilization Board has completed agreements with 11 Canadian firms for the disposal of 50 million pounds of butter oil on export markets. The product is being offered for export sale at 27 cents a pound. Agriculture Minister Hon. Harry Hays states that this means the government's entire stock of butter oil—other than that considered necessary for the domestic market—is at present committed for sale.

Norman Hogg has become the first farmer to be elected president of the Canadian Council on 4-H Clubs. Hogg, who is a farmer at Uxbridge, Ont., as well as being a soldier, businessman and professional agriculturist, represents the Canadian Shorthorn Association on the 4-H Council.

World wheat trade continues to increase. The total of 991.9 million bushels of wheat and flour exported from Canada, United States, Argen-

tina and Australia during the August-February period of the current Canadian crop year represents an increase of 25 per cent over the previous record level exported during the same period in 1961-62.

Basic price support levels to producers of dairy products are to be maintained under the 1964-65 dairy support policy. The butter support level for producers will be held at 64 cents a pound. However, the consumer subsidy has been reduced by 1 cent per pound. This means that the Agricultural Stabilization Board will be selling butter for 53 cents a pound. Manufacturers will be authorized to pay eligible producers 13.3 cents per pound for butterfat used for creamery butter production.

Cheddar cheese supports remain at 32½ cents per pound but to encourage higher quality cheese, a payment of 3.6 cents per pound will be made on Canada First Grade Cheddar. This replaces the policy of paying 30 cents per cwt. on milk used for cheddar production.

Export assistance on certain dairy products will be continued about the same as last year, as will the purchase program on dry skim milk and the assistance on milk used for the production of casein.

Beaver alfalfa, which is performing well in some parts of Western Canada, has turned out to be a disappointment in Ontario. In tests carried out in that province, it failed to equal in performance some of the other commonly grown varieties.

Some fertilizer dealers in Ontario are now offering a bulk blending service to their customers. This means that farmers will be able to order any formula fertilizer they require, and tailor their fertilizer applications to the specific needs of each field.

As part of an intensified program to control and prevent swine diseases the Ontario Department of Agriculture has appointed a new veterinarian to its staff. He is Dr. Lloyd Coleman of Kemptville, who will work primarily with producers enrolled under the Certified Herd Policy for swine.

According to a report from the United States Department of Agriculture, Canadian farms lead the hemisphere in production gains. Taking 1952-54 as a base of 100, farm production in Canada last year was 132. The U.S. index of total production was 121 in 1963.

As farm mechanization increases, the farm labor force declines. According to the 1961 census, only 12 per cent of the male labor force was engaged in farm occupations in contrast to 39 per cent in 1911 and 19 per cent in 1951.

A beef bull testing station is being set up in the western part of Manitoba.

Prof. G. I. Trant of the O.A.C. predicts that if present trends continue we can expect that by 1970,

17 per cent of Canadian farmers will have sales of \$10,000 or more.

In presenting his annual estimate to the legislature, Ontario's Minister of Agriculture, Hon. William A. Stewart, warned that present trends toward concentration of buying power in a few hands could lead to cornering of the food market and monopoly control in the food industry. He said that there are disturbing signs in both Canada and the United States that monopoly control is developing not only in the retailing and processing of food but in production at the farm level as well. He went on, "Apart from the adverse effects this trend may have on the open and competitive marketing of farm products, on the effectiveness of producer marketing boards, and the security of farmers generally, it also may have some serious long term implications for the consumer who up until now has enjoyed the benefits of free and open competition in the sale of food products." President Johnson in the United States recently expressed similar concern over the situation in that country.

The Canadian Wheat Board has concluded a long term wheat agreement with East Germany under which that country will purchase 27.6 million bushels to be shipped over a 3-year period.

Rabies in both wild and domesticated animals is causing growing concern in Manitoba. Since skunks are the main source of infection,

farmers and rural municipalities are urged to undertake a skunk control campaign.

A total of 124 agricultural students at the University of Manitoba received bursaries through the provincial Department of Agriculture during the 1963-64 term. The interest-free loans totaled \$38,295. The loans are repayable upon completion of the course.

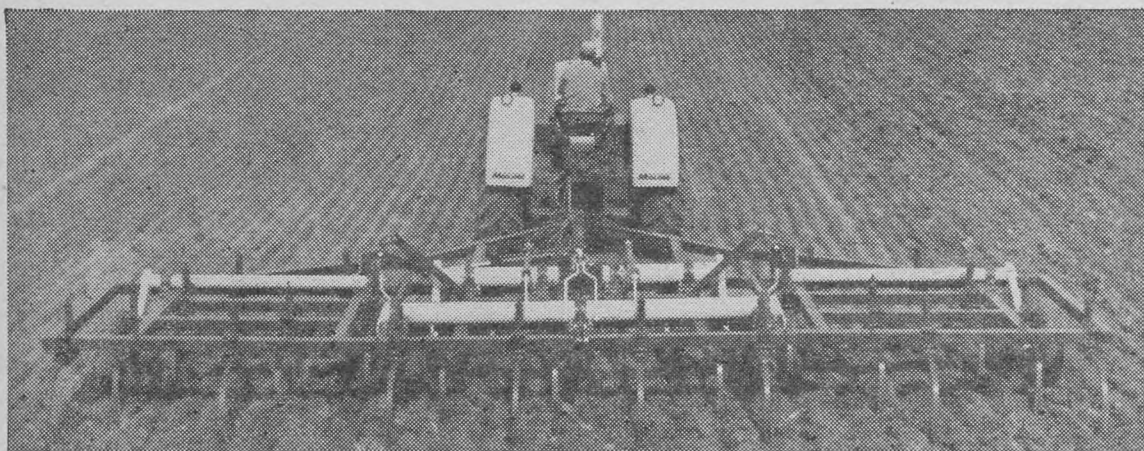
A zip-type can for canned meats has been introduced by a firm in Chicago, reports the Meat Packers Council.

One of Canada's foremost livestock experts, Dr. Karl Rasmussen of Ottawa, has been elected president-elect of the Agricultural Institute of Canada, the national association for over 3,500 professional agriculturists.

The seventh potato industry conference will be held at Lethbridge, Alta., on July 6 to 8.

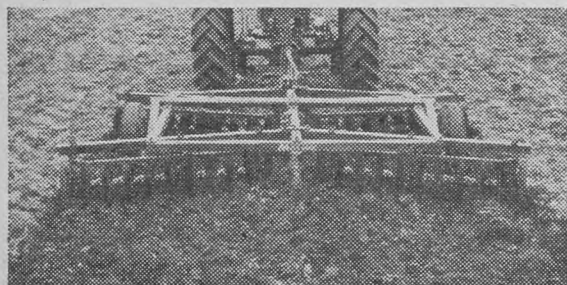
Land in Peterborough County, Ontario, which is deemed to be unsuitable for agricultural purposes has been approved by the Ontario government for redevelopment under ARDA. Officials point out that development of the area for forestry would stabilize and strengthen established wood-using industries in the area by insuring a supply of raw material. The area would also provide water conservation facilities and allow the development of wildlife and scenic resources.

(Please turn to page 57)

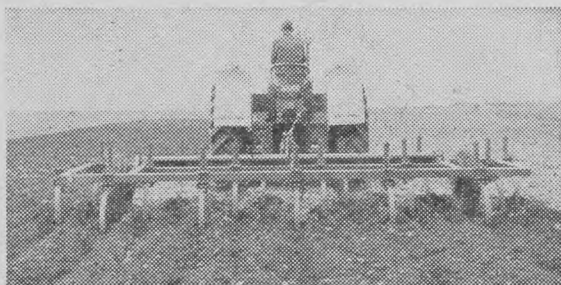


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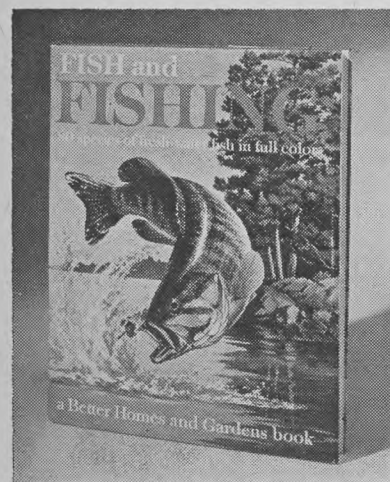
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[Guide photos]
Grower Lou Schenk finds that he can cut 3 weeks from the usual growing time of chrysanthemums by using liquified carbon dioxide. The plants also have thicker stems

CANADIAN GREENHOUSE growers of vegetables and flowers are capitalizing upon the implications of an experiment made in the early 17th century when a 5-pound willow tree was planted in 200 pounds of soil. In 5 years the tree had grown to 169 pounds and the soil weighed 199 pounds 14 ounces! The primary nutrient for the willow was the carbon dioxide (CO₂) present in the atmosphere.

Currently there is world-wide interest in the addition of CO₂. According to Bob Wilcox, extension specialist at Ontario's Vineland Experimental Farm, "many commercial growers are so impressed with the results that they question whether they can compete if they neglect to use CO₂."

The air we breathe contains three parts CO₂ in 10,000 by volume. The amazing process of photosynthesis enables crops to extract, from the atmosphere, the CO₂ they require. Curiously enough, when growers put CO₂ into their greenhouses they are bringing the CO₂ level up to the concentration present in the atmosphere when the world began.

Dr. S. H. Wittwer, of Michigan State College, cited a number of reasons for the upsurge of interest in CO₂ when he spoke to Niagara area growers recently:

- Low pressure liquid and dry forms of carbon dioxide are now readily available.

- Controlled environment houses have increased understanding of other growth factors, such as light, temperature, mineral nutrient levels and moisture.

- Greenhouse culture of flowers and vegetables in both glass and plastic structures is on the increase.

- Combustion units are being used which will produce CO₂ and heat if desired.

SCHENK FARMS and Greenhouses, at R.R. 3, St. Catharines, Ont., were among the first commercial growers to try CO₂. Liquid CO₂ is delivered to storage cylinders. It is distributed through economic 1-inch plastic mains and smaller diameter plastic pipes with a pinprick hole every 10 feet. A single quarter-inch pipe is sufficient for older, narrow houses while two half-inch pipes are used in wider houses.

CO₂ . . .

Greenhouse Gold Mine

by PETER LEWINGTON

Field Editor

Because plants manufacture carbon dioxide during the night and use it by day, additional CO₂ is added between the hours of 9:00 a.m. and 4:00 p.m. The use of CO₂ is only economic in winter from October to March when, due to cold weather, it is necessary to restrict ventilation, and in consequence, the volume of air available to the growing plants.

"We can't give all the credit to CO₂," says Lou Schenk, Jr. "We are trying to improve our growing techniques all the time. In fact I wondered if the CO₂ was really paying for itself. As a test it was shut off in the best of three houses of 'mums. In just 3 weeks that best house was reduced to the worst. That satisfied me about its benefits."

During the past winter the Schenks paid some \$2,200 for CO₂ in their 65,000 square feet of glass-house. This is what they got for their money:

- Chrysanthemums were ready 3 weeks earlier with greatly reduced wastage and stem breakage.

- One or two fewer stems were required for a good saleable bunch. (Incidentally, when we visited the Schenks', my wife purchased a bunch of 'mums which lasted a whole month in the house — presumably because of the vigor of the plants and their thicker stems.)

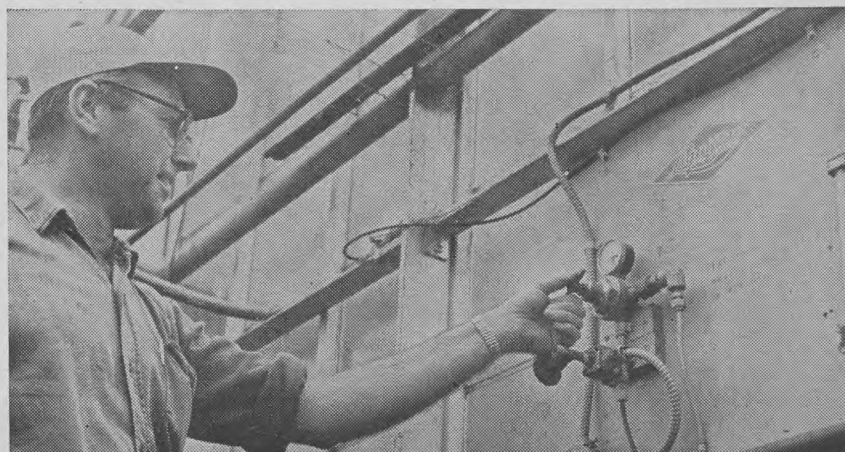
- With geraniums, CO₂ induced more slips or cuttings per stock plant and faster, better rooting of the cuttings.

The potential for the use and man-

agement of CO₂ brought forth this assessment from Dr. Wittwer: "For an industry characterized by huge capital investments, threatened by rising costs of production, and increasingly severe competition from products produced outdoors and shipped in, the grower of greenhouse vegetables has an unprecedented opportunity to strengthen his competitive position through substantial yield increases, a marked improvement of quality, and year-round production by enrichment of greenhouse atmospheres with carbon dioxide."

"The production potential for greenhouse-grown vegetable crops of the future is comparable to that which appeared a century ago when the benefits of chemical fertilizers were first realized. The ultimate possible rewards are so great that growers of greenhouse vegetables can begin immediately to use and to benefit from the results of the research findings, even though new problems, heretofore not encountered, will arise and require solution."

Interesting work with carbon dioxide is also reported from various parts of the world. In Denmark, better quality carnations were grown in 2 weeks less than the normal time while lettuce yields were increased and three crops grown where two were grown before. One research worker has described the use of carbon dioxide to stimulate growth as "an abandoned gold mine." Canadian growers like Lou Schenk, Jr. are now working the old mine to good advantage. V



In winter Lou Schenk uses liquified CO₂ between 9 a.m. and 4 p.m. As a result he gets more cuttings from his geraniums plus better rooting and growth



[Robinson photo]

McCaig's herd (which includes the famous "Brampton" herd) on lush pasture with the irrigation system in use in the background

Why Irrigate Forages?

by **DON BARON**

Editor

NOW THAT THE ACCENT is on intensive farming—on making every acre of land produce more—it's no wonder that forage crops are coming into their own. Whether they are grown for pasture or for hay, forage crops respond well to good management.

One management practice that is helping producers boost forage yields is irrigation. Interest in it is rising right across the country.

Don McCaig, who moved his Jersey herd from Brampton to Norval, Ont., 4 years ago, reports that by irrigating his pasture and hay fields and

by using other good management practices, he has been getting higher milk production. "Last year our milking herd averaged about 72 head and that group pastured on 27 irrigated acres until July 17," he reports. That meant nearly three cows per acre. Individual cows were making records of 14,000 to 16,000 lb. of milk and even more during their lactation period, under this feeding program. McCaig would not be without irrigation now. He is not alone, either.

Last November, Country Guide reported how Bruce Harper, Ontario's pasture champion, grazed 35 cows on 12 pasture acres for 15 weeks. Irrigation was the key to his program and he figured it enabled him to take off \$400 worth of milk per acre from his pasture.

Out in British Columbia, scientists at the research station of the Canada Department of Agriculture at Kamloops have been working with irrigated pastures since 1951. They grazed beef cattle on the pastures most of the time. With a dozen years of experience under their belt, they report the following results:

1. Irrigated pastures will carry 1½ to 3 animal units per acre (one animal unit equals a 1,000-lb. cow).
2. Yearling steers will gain over 2 lb. a day on pasture.
3. Irrigated pastures produce 500 to 1,000 lb. of beef to the acre—the average is 700 lb. (the grazing season in British Columbia is usually from the first week in May to the end of September but this can vary depending on the weather).
4. Irrigated pastures outyield native pastures by as much as 100 times and produce a marketable animal 2 or 3 weeks earlier.

Meanwhile, farm extension people in Saskatchewan are turning to irrigation as another means of building their livestock industry. A short course in irrigation for farmers was held at the University of Saskatoon in early June.

SAVE WATER RESOURCES

Agricultural engineer J. M. Murray explains that there are tremendous water resources being wasted in Saskatchewan today. Stream water and other runoff is being lost and no effort is being made to save and use it. There is also plenty of ground water which can be developed. The need, he says, is to build storage reservoirs, and to use the water from these, and from larger prairie sloughs to irrigate adjacent land. Right now the Saskatchewan Research Council is busy mapping

✓ To make use of your water resources

✓ To get 1,000 lb. beef per acre

✓ To get \$400 worth of milk per acre

underground water supplies in the province, which could be used for irrigation.

The reason for this activity in Canada's dry-land province is easy to see. Higher and more efficient production is becoming necessary. Small irrigation projects throughout the province will help achieve this goal, says Murray.

The question is, does irrigation for pasture and hay crops pay? There are no doubts in the minds of many that it does. But there are plenty of factors to consider.

Dr. Stan Young of the Crops Science Department at the Ontario Agricultural College suggests that except in certain instances it is difficult to justify an irrigation system for pasture and hay fields in Ontario. However, if a farmer has an irrigation system for specific use on some other crops, or if he is short of land—say he lives on the outskirts of an expanding city—it might well pay to irrigate to boost pasture and hay production.

(Please turn to page 56)

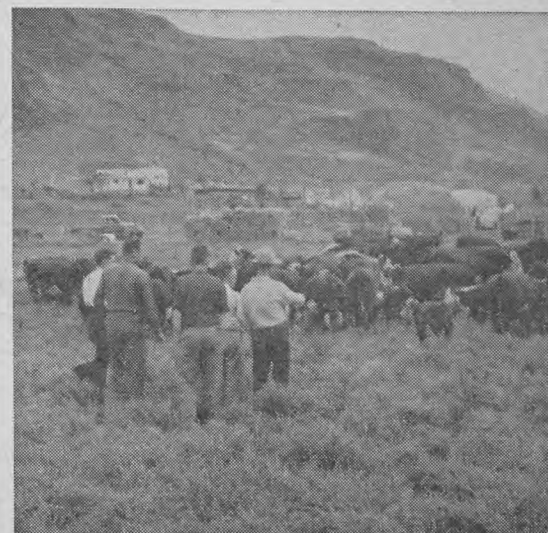


[Guide photos]

These two cows, full sisters in the herd of Don McCaig at Norval, Ont., are making big records on irrigated pasture. The cow at left, Brampton Line Six, is 9 years old. She had produced 16,034 lb. of milk and 844 lb. of fat by this spring with 42 days still to milk in her lactation. The other cow is Brampton Line Six Radar, an 8-year-old that had produced 14,566 lb. of milk and 744 lb. of fat with 52 days still to go in her lactation



This stand of alfalfa got ahead of the cows and Don McCaig is ready to cut it for hay



This is the beef herd at Kamloops, B.C. The herd stands knee deep in irrigated pasture

HIGH-PRODUCTION, LOW-LABOR DAIRY FARM

by **CLIFF FAULKNER**

Field Editor



[Guide photo]
Gunther and Marianne Schwichtenberg at the rear of the old home which contains the original log house built by Captain Agassiz in 1848

It's a family farm, but on 112 acres, there are . . .

- a 45-cow milking herd, which is being expanded to 60 cows. Milk production climbed nearly 2,000 lb. per cow in 3 years
- a loose housing barn (with open stalls being planned)
- a 6-place milking parlor
- a hay storage-feeder
- a liquid manure handling system
- an intensive hay, silage and pasture program

WHEN GUNTHER SCHWICHTENBERG first came to look at the place, the only building left was the house which had stood there for 116 years. But Gunther saw the lack of farm buildings as an advantage. He could go ahead with his plans for a modern loose housing system without including any old barns in the layout.

Schwichtenberg didn't come to Agassiz, B.C., or even decide to be a dairy farmer, by chance alone. He was born and raised on a farm in East Prussia, and attended a German agricultural school for four terms. In fact, his sister is now teaching at an agricultural school in that country, and sends him releases on new developments there.

When Gunther first came to Canada in 1954, he brought his motor bike with him. Landing in Quebec, he traveled right across the country looking for a good place to settle. But he knew about Agassiz. He had friends there who used to be neighbors of his folks back in East Prussia. He liked what he saw of the district and decided this was the area he was looking for.

The next problem was to find money to buy

the place and develop it. Gunther took a welding course and worked at this trade for about 5 years at Kitimat, B.C., Calgary, Alta., and on Vancouver Island. By 1959 he was ready to buy the farm, and moved there with his wife, Marianne, and their young family a year later. He soon found that being able to weld was a big asset.

The Schwichtenberg farm consists of 112 acres, all of them cleared and producing. Gunther laid out his buildings with an eye to future expansion. A milking parlor and bulk tank building, a hay storage-feeder unit and a loafing barn, form three sides of a large square, part of which is concrete covered. All structures have been placed so their facilities can be extended when the need arises.

Of concrete block construction, the 6-place milking parlor and bulk tank unit has a slightly "alpine" appearance with the overhang of its sharply gabled roof supported by wooden posts. Cows enter from one side and leave by the other. Broad sliding doors are also located at both front and rear. In the parlor itself, Gunther used his welding skill to make the stalls from spare

pipings. Milk capacity could be doubled by building a similar parlor at the other end of the bulk tank room.

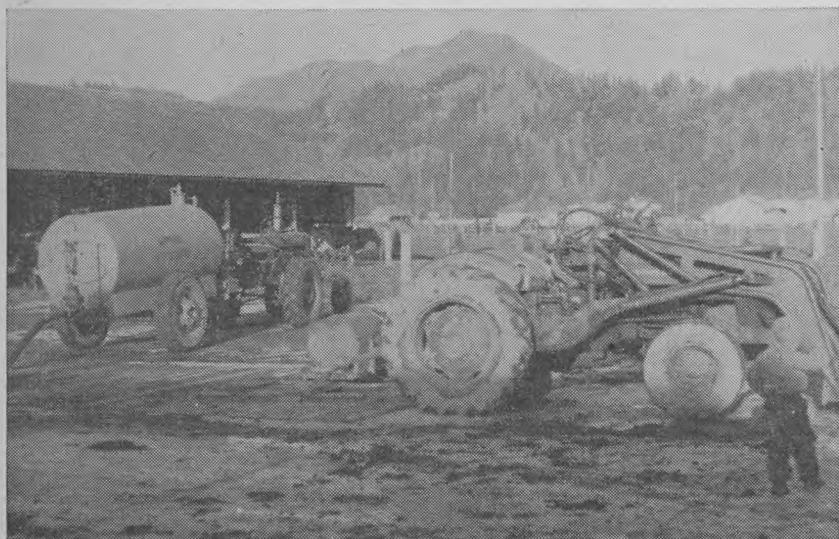
PIPELINE MILKER

The dairy is equipped with an automatically cleaned pipeline milking system which feeds into a 600-gallon bulk milk tank. There is a thermostatically controlled electric heater suspended from the ceiling to keep lines from freezing, and an electric water heater. Also located in the dairy is a pressure pump which supplies water to both yard and pasture. In the loafing area, stock drinking water is supplied by an open concrete trough and two electrically heated bowls of the "press lever" type. But the cows seem to favor the larger drinking unit, according to Gunther.

"The big tank has to be frozen solid before the cows will drink from the bowls," he said.

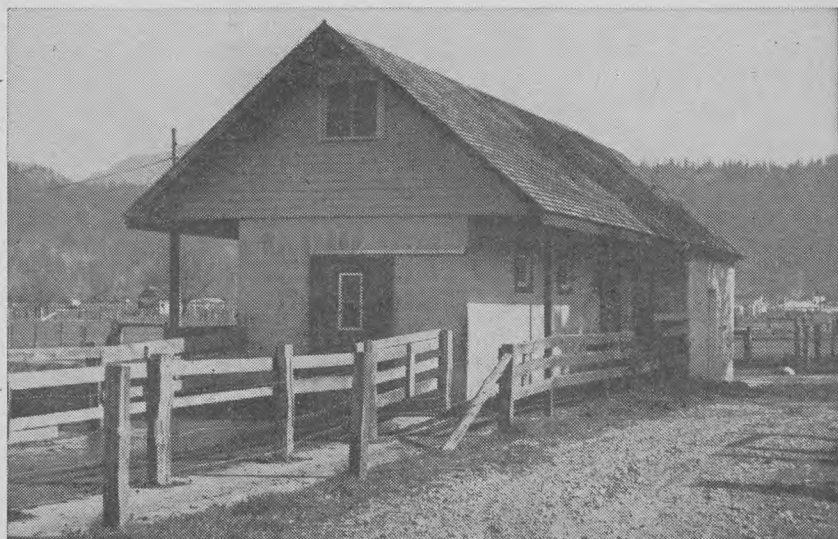
Located at the top of the yard, the pole frame hay storage-feeder is 34 feet by 60 feet. Now accessible from three sides, its feeding capacity can be greatly increased by extending the fence so the animals can feed from the fourth side. To save hay, mangers are now fitted with hinged covers of the "ladder" type similar to those featured in Country Guide, October 1963. Future plans call for a dryer to be installed in this building, and for feeding nothing but chopped hay so the unit can be filled with a blower. Capacity can be doubled here too, by adding another storage-feeder on the vacant side of the square.

Also of pole frame construction is the 42 ft. by 120 ft. loose housing barn. This structure is already large enough to take care of Gunther's immediate goals which are to increase his present 45-head milking herd to 60 milkers. The big change here will be introduction of individual open stalls to save labor and bedding.



[Gagel photo]

Tractor-powered agitator (right) keeps liquid manure well mixed while tank at left is being filled so that the manure can be evenly spread on the fields



[Guide photo]

Cinder block milking parlor has an "alpine" look. Bulk tank room is at the rear. It was built with the idea of adding another 6-place parlor on the far end

"Bedding alone is now costing me up to \$500 a year," said Gunther. "Spreading it and cleaning it out is taking too much of my time."

A ONE-MAN OPERATION

This points up the keynote of the whole Schwichtenberg enterprise — maximum production with a minimum of labor. The aim is to have a one-man operation — except for casual labor at haying time — even when the milking herd has been increased to 60 cows. One way to do this is to make cows go to where the feed is stored.

Another way to keep labor costs down is to reduce the amount of field work. Gunther buys all his grain so he can concentrate on the production of hay, pasture and silage.

Gunther is now using a tile-drained trench silo. He unloads it by driving in with a front-end loader and dumping the silage into the feed mangers. This will eventually be replaced with an upright silo — the type which has a circular feeder around the bottom instead of the type with a long feed bunk stretching down the yard which would "divide the yard in two and increase your cleaning problem," he noted. "You know," he added, "I'm glad I didn't have enough money to do the whole job at once. I'm learning from experience how I really want to have it done."

BOOSTING YIELDS

Because there is no way of adding to his acreage, Gunther intends to build up the soil to increase his yields. His nearness to the Agassiz Experimental Farm has been a big help in this. To keep a check on his progress he tests his soil every 3 years. Although all the land gets a dressing of 20 to 25 lb. per acre of commercial fertilizer each year, the main fertilization program involves regular applications of manure.

A 36 ft. by 10 ft. by 8 ft. liquid manure tank is located in the concrete-covered exercise area, close to the storage-feeder. The concrete slopes down to the tank to aid drainage. As this tank fills up about every 2 weeks, Gunther has left room for two more similar units so he won't have to haul manure in foul weather. The tank is emptied by a vacuum pump - equipped self-loading tank trailer powered from the hauling tractor's p.t.o. Also p.t.o. powered, is a portable tank agitator which eliminates the need for a built-in

agitator that would stick up above the concrete and restrict free movement of the cows.

Access is no problem on the Schwichtenberg farm because the place is divided and bordered by paved roads. Except for those along the roads, all fences are electric. Gunther intends to have the whole farm fenced this way in time. Old-type fences need too much upkeep, posts are costly, and well-trained labor is both costly and hard to find.

PASTURE PROGRAM

All of his 96-head herd — mature animals and young stock — are strip grazed. Fences are moved twice a day.

The main forage crops are alfalfa and a recommended grass-legume mixture containing ladino clover, orchard grass, perennial ryegrass, timothy and alsike clover. As this type of pasture generally has to be plowed and resown about every 5 years, Gunther plans to look for a mixture that will give a more permanent sward.

"Ladino has a tendency to take over in a newly seeded pasture because it grows so vigorously," he said. "Cows bloat too easily on it. Some of my neighbors have lost animals this way."

The grazing season in the Agassiz area is from about April 15 to October 15, Schwichtenberg told Country Guide. In a normal year he gets three cuts from an alfalfa field — some years it is possible to get a fourth. Grazing is rotated between grass and alfalfa fields. While the cows are grazing alfalfa, a first cut of silage is taken from a grass field. The animals are then moved to the grass and the alfalfa is left to produce the main hay crop. When this hay crop is harvested, the cows return to alfalfa to give the grass field a chance to produce another cutting of silage.

In seeking maximum production, Gunther hasn't overlooked his herd. Using top A.I. sires and weeding out poor milkers, he has increased his average annual production per cow from 9,398 lb. of milk and 386 lb. butterfat to 11,171 lb. of milk and 445 lb. of butterfat in 3 years. This year, he expects the herd to reach an average of 12,000 lb.

Accomplishments such as these augur well for the future of the well-equipped, well-managed family farm. ✓



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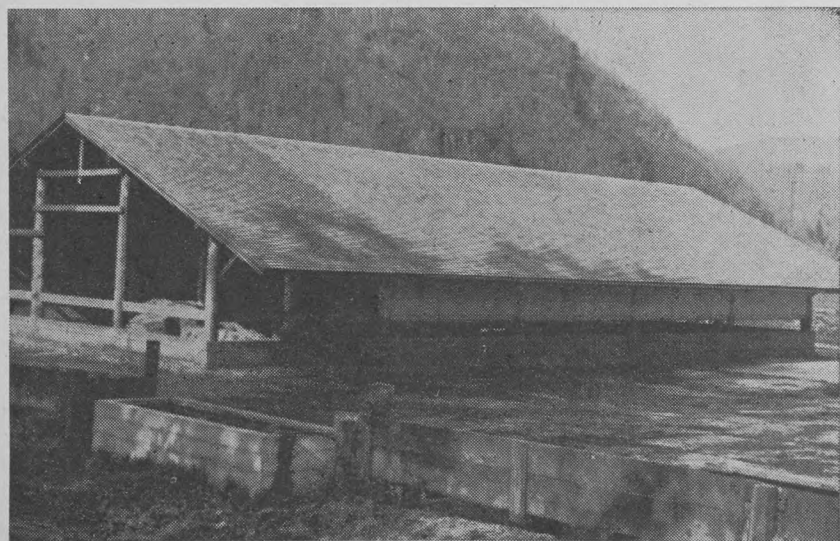
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Co-Operative in Principle



Co-Operative in Practice



Here is a close-up of Gunther Schwichtenberg's hay storage-feeder. The liquid manure tank lies underneath the concrete ramp that is in front of it

Gas-Fired Orchard Heaters

Don Wright devised his own frost protection system using natural gas. Dr. Jim Marshall is using propane in a new system that could be adapted by anyone

by **CLIFF FAULKNER**

Field Editor

SINCE OIL-FIRED smudge pots have run afoul of air pollution regulations in California, frost-plagued fruit and vegetable growers have been looking at other methods of crop protection. Two tree fruit men at West Summerland, B.C., have solved their problem by using gas-fired burners. One system, using natural gas, is only practical if a gas line is located near your property. The other, which uses propane gas, can be installed anywhere there is a frost problem.

Three acres of Don Wright's 20-acre orchard could well qualify as a problem area. Located in a triangle of land about 15 feet lower than the rest of the property, it has produced only two crops in 5 years because of spring frost damage. This represents a loss of about \$4,500 for that period. Because the trees are young they return only about \$500 an acre. In a mature planting of this size the loss would be close to \$10,000.

Don Wright has suffered his share of cold weather damage. He had to do a lot of replanting after the big freeze-up of 1955. While he was waiting for the new trees to grow he took an engineering job with Inland Natural Gas Co. Ltd. where he supervised many gas installations. When his trees came into bearing it was logical that he would think of gas heat as a means of protection. For one thing, the gas main to his house ran right through a corner of the frost pocket.

"I've never liked smudge pots," he said. "You need some place to store the oil, and it's bulky and bothersome to handle. Every time cold threatens, you have to fire up well ahead of time, and it spreads a grimy smog over the whole area."

MAKES HIS OWN

The gas for Don's system comes from a 2-inch main located about 15 inches below the ground surface. The distribution system consists of 900 feet of 1¼-inch header pipe and 2,900 feet of ¾-inch laterals. All the piping is steel, coated and wrapped, and all the joints are welded. This is made necessary by natural gas installation regulations and adds greatly to the cost of the system.

Burners are placed 15 feet apart. Lateral lines supplying gas to them run diagonally, and are also spaced at intervals of 15 feet.

Because of his knowledge of such installations, Don was able to save money by making his own burners. He kept them as simple as possible,

using a ⅝-inch square head plug drilled with a .210-inch hole for the nozzles. The burners have no pressure regulators, but the 25 lb. per square-inch line pressure is reduced by a coupling in the head assembly fitted with an orifice plate containing two .060-inch holes. Each burner is fitted with a ¼-inch brass turnoff cock and covered by a tripod-mounted steel plate to spread the heat and keep the flame from blowing out.

The burners were made so they can be easily dismantled when the frost danger is past. This enables Don to cut his grass cover crop without having to maneuver around the jets. The location of each burner is marked by sand which has been treated with Simazine to control weeds. To re-install the heating units each spring, Don just has to scoop the sand away with his hand and attach the burners to the main.

When temperatures in the Wright orchard drop fairly close to the freezing point, a buzzer sounds in Don's bedroom. He jumps up and goes down to the orchard where he can watch the thermometers. If it continues to drop, he takes a propane torch and starts lighting the burners. It takes about 15 minutes to fire the 150 burners located in the 3-acre frost pocket. Within half an hour the temperature can be raised 5°F. The rising heat benefits the upper orchards to some extent too, by causing air movement as cold air is drawn down below.

The Wright installation cost about \$1,000 per acre. Don also had to pay for the meter which is located in a corner of the orchard about 10 feet off the main line. Last year, he had to run the system for 16½ hours, and his gas bill was \$160.

"When you amortize the cost over a 20-year period it isn't very high," he pointed out, "especially when you consider that the productive capacity of this young orchard is increasing all the time."

The orchard contains an acre of 12-year-old Veteran peach trees, an acre of Red Delicious apples and an acre of Bing and Lambert cherries. The ages of the apple and cherry trees range from 5 to 12 years.

But Don Wright is the first to admit his heating system is only practical if a natural gas line runs close to the

(Please turn to page 56)

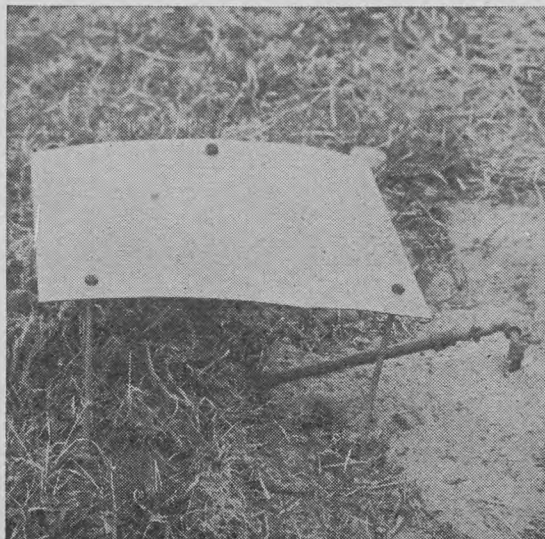


[Guide photos



ABOVE: Dr. Jim Marshall (top) shows one of his open-jet propane burners; the second picture shows a burner series in the Marshall orchard

BELOW (l. to r.): Don Wright; closeup of a Wright burner, showing the shutoff cock and the tripod-mounted flame spreader; and a line of burner installations in Wright's lower orchard



**A priceless water supply,
a swimming hole or perhaps
the pleasure of catching
a fat trout—these are
some of the benefits of . . .**

Multi-Purpose Ponds

A POND IS RAPIDLY becoming a necessity on farms in many parts of Canada. The financial assistance and engineering advice offered by the more progressive conservation authorities in Ontario in recent years boosted pond numbers by many thousands.

There are many reasons. Water tables have been dropping, especially in the southern part of the province, even though Ontario has sufficient precipitation, even in the drier years. What is required is some method to store the water for later use. Further impetus for pond construction comes from increased water use in the farm home and higher populations of beef and dairy cattle, hogs and poultry. Irrigation, now largely restricted to specialized crops, also offers a tremendous potential for expansion.

"Farm water should be thought of on a long-term basis, not just in times of emergency or drought, because the amount of water needed for today's farm operation greatly exceeds that of a few years ago," says Prof. H. D. Ayers of OAC's Engineering Science Department. "Winter precipitation for the past 2 years has been 25 to 40 per cent less than normal. Even if there is normal rainfall in 1964, a significant rise in ground water levels cannot be anticipated for a year or more. Serious consideration should be given to improved or alternative farm water supply."

A well planned and properly constructed pond is a lasting investment which amply repays the initial cost. A good multi-purpose pond can do all these things:

- Provide water for livestock, irrigation and fire protection.
- Add to property values.

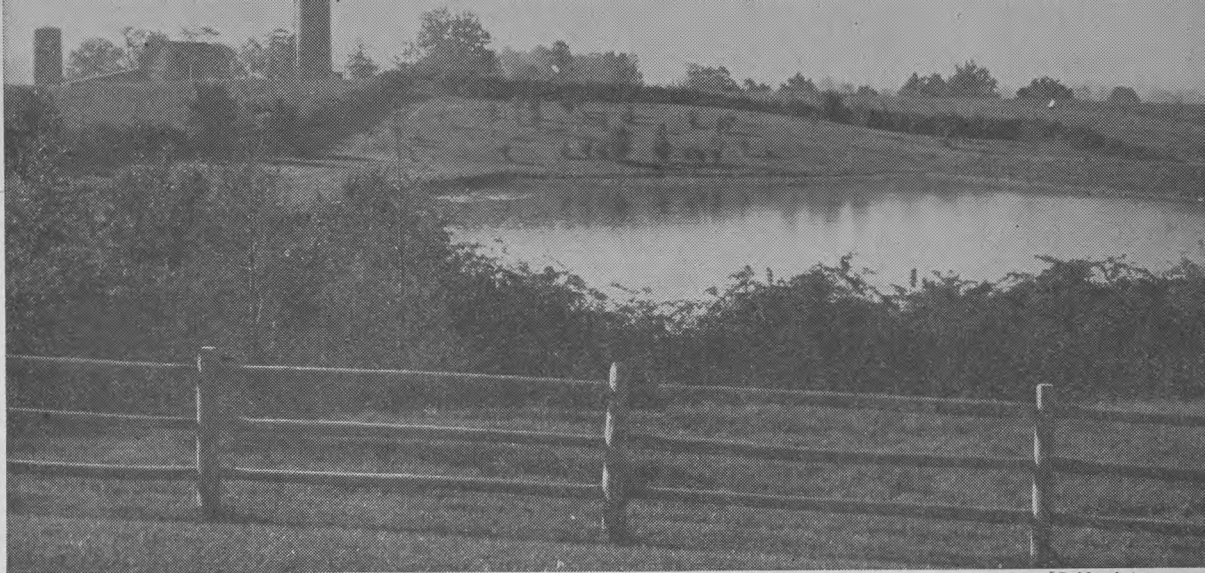
✓ **Cost.** A one-third-acre pond, 10 to 12 feet deep, may cost \$500-\$700 and have a capacity of 400,000 gallons.

✓ **Water requirements per month:** Cattle, 1,000 gallons; hogs, 100 gallons; farm home, 1,500 gallons per person.

✓ **Volume:** To find the capacity of a pond, in gallons, multiply the pond area in acres, by the depth in feet, by 100,000.

✓ **Irrigation:** 270,000 gallons per irrigated acre.

✓ **Fish:** 400-500 Speckled or Kamloops trout per surface acre can be stocked in the fall for fishing the following summer.



[Guide photos]
A gully is dammed, and a haven for fish and wildlife created. Fire protection and water for livestock are an added benefit

- Provide recreational dividends such as swimming, skating and fishing. It can help provide a habitat for wildlife too.

- Provide an insurance value which cannot be measured.

Normally a pond will not be of much value until the year following construction. After that it can be an enduring asset, or it can depreciate rapidly depending upon the construction and the provisions made to protect it from livestock.

Proper pond size will vary with each farm. An area of some 5,000 square feet is a minimum for a worthwhile practical pond; depth should be 10 to 12 feet. Maximum size will vary with topography. Dr. H. R. McCrimmon of the Department of Zoology, who has done a great deal of research on farm ponds, advises against building a pond more than one acre in size. "Management problems increase with size," he says. "Dugout and by-pass ponds of medium size give the best results."

THREE KINDS OF PONDS

The three main types of farm ponds are the dugout, the by-pass and the dam pond.

A functional and lasting *dugout pond* should be at least 60 by 90 feet. Before making this pond, strip the topsoil from the area to be excavated and from where the debris is to be spread. No land will be wasted if the topsoil is saved in this way and spread over the subsoil and stones on completion of the job. Evaporation losses will be kept to a minimum in ponds that are at least 10 feet deep, with fairly steep sides; also weed and algae growth will be controlled and the water will be less likely to be turbid.

If cattle are to obtain water from the pond, a stock-proof fence and a pasture pump are desirable. If the pond is not protected in this way, it will have to be cleaned out within a very few years.

The *stream by-pass pond* is rather more complicated. It requires an inlet and an outlet. Provision must be made to protect the side of the pond adjacent to the stream, from flash floods along the original watercourse. Mel Monteith, of Thorndale, Ont., has an excellent pond of this sort which, in addition to the more obvious benefits, also yields some nice trout.

Where nature has provided suitable gullies and the soil strata holds water, a dam can be erected for the *dam pond* to impound sufficient water for even the demands of irrigation. As run-off must be relied upon for water supplies, pasture or hay are desirable covers for the area draining to the pond. There is an increasing danger of contamination in this type of pond through chemical and fertilizer applications, especially where residue problems have arisen.

Where wells, cisterns or springs are unable to provide adequate water for use in the home, it may be possible to pipe water from the pond. However, ground water, which replenishes wells, may have been months or even years percolating through soil and rock. Pond water does not have

by PETER LEWINGTON

Field Editor

this natural, elaborate and effective filtration. Consequently, pond water is only satisfactory if precautions such as the following are taken against contamination:

- Only clean water should enter the pond. This means a clean watershed, one which is not contaminated from barns or yards.

- The pond should be deep and kept free of algae and weed growth. It should be fenced.

- It cannot be used for fishing or swimming.

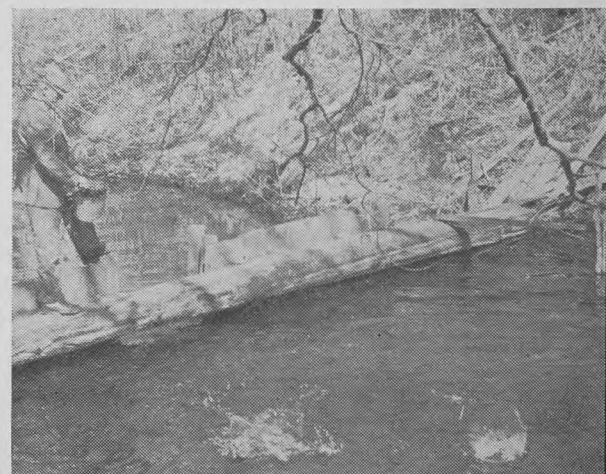
- Filtration and chlorination are necessary if the water is to be used in milk houses.

WHAT ABOUT FISHING?

Fish in the farm pond give rise to possibilities for recreation or even commercial ventures. "A good trout pond," says McCrimmon, "can yield several hundred pounds of fish per acre per year (Please turn to page 56)"



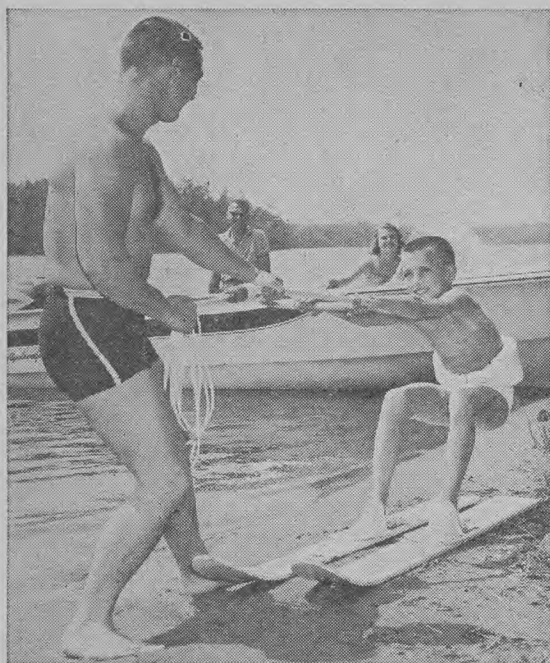
Francis Olde supplies farmers and "pay-as-you-fish" enterprises with Speckled and Rainbow trout



Trout leap high to take feed thrown by Mr. Olde

Anyone Can Water Ski

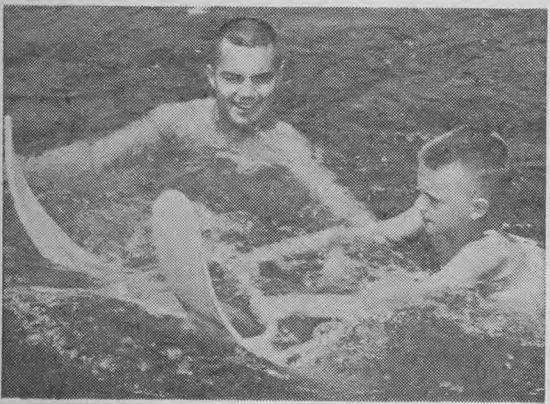
Story and photos by RAYMOND SCHUESSLER



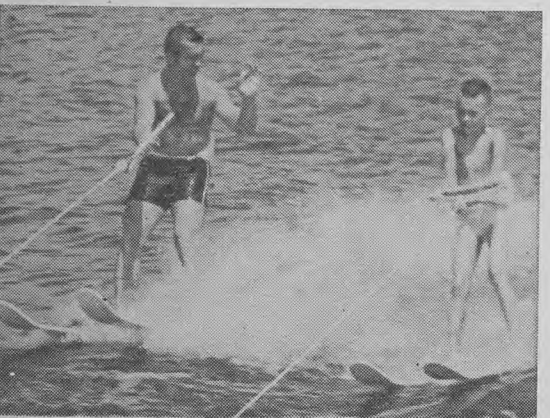
First: Try a dry run. Sit down on the skis and have someone take hold of the tow rope and pull you up. It is wise to try this several times



Second: Learn how to hold the tow rope. Grasp it in one hand. Coil the rope loosely in the other. Play out the rope as the boat moves away



From the beach: Get into water at least hip deep. Sit down, letting tips of skis come up and out of the water. After your driver has taken up the slack in the line and when you are ready to go, let him know you are ready



When skiing, keep your knees flexed slightly and your arms straight out. Lean back against the pulling of the towboat and enjoy your ride

WATER SKIING IS NOT an expensive sport if a group organizes to buy and care for a boat. Water skis cost about \$30 and 60 feet of good rope about \$4.

Water skiing is an easy sport to learn. In fact, you can ski the first time you try it. However, you will save yourself considerable wear and tear if you attempt your first ski exercises on dry land. This way you will get used to the pull of the rope and the proper rising motion.

First, place your skis on the beach about 6 to 9 inches apart. Put them on by pushing the foot as far forward in the binding as possible, and pulling up the heel piece. Now sit on the back ends of the skis with legs bent tight against the chest. It is very important to keep your arms straight at all times.

With someone holding the other end of the rope and bracing his feet against your skis, let him pull you up to a standing position without any assistance from you. Try this several times, keeping knees bent, arms straight and body slightly forward. It is the same motion as getting up evenly from a low chair.

Now that you have mastered the getting up procedure on dry land, you are ready to hit the water. There are numerous ways of starting, but let's concern ourselves with starting from the beach.

In about 2½ feet of water, put on your skis and grab the tow bar. Now, raise the tops of your skis above the water as a signal for the boat driver to start the boat. When the boat starts a fast steady pull, allow yourself to be brought slowly to the standing position.

Keep your knees bent, arms straight, and have your weight balanced directly over your feet in a half crouch position. Wobbling skis will automatically straighten when the boat reaches 20 m.p.h. Do not pull up with your arms at the take-off. Keep them straight and let the boat pull you.

A slow speed of about 20 to 25 m.p.h. is recommended until you get the "feel" of the skis. When the boat turns off to the right, relax your knees, push slightly with your left leg and lean your body in the desired direction. To change direction, shift your weight and exert the pressure with your right leg. Practise these turns inside the wake until you have mastered them.

Now you are ready to cross the wake—that large mound of water that has been hemming you in on both sides. Let's try the right side. Pull to the left, inside the wake and make a right turn as you have been practising. This time you do not stop. Instead you pull straight on through it with the knees relaxed and slightly bent so they absorb the shock like a spring on a car. Follow the same principle when hitting rough water. Now, to get back inside the wake, pull out to the side about 20 feet and reverse your turn. It is easier to cross back if you hit the wake going straight toward it, rather than trying to slip back in sideways.

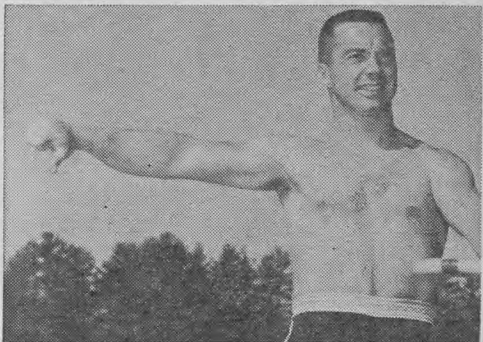
Stopping is easy. Just let go of the tow bar and, after sliding along on top of the water for about 15 feet, you'll slowly sink into the water.

These are the basic techniques: starting, turning, crossing the wake, and stopping. Strive for perfect form: back straight, arms extended, shoulders back, head erect, skis close together.

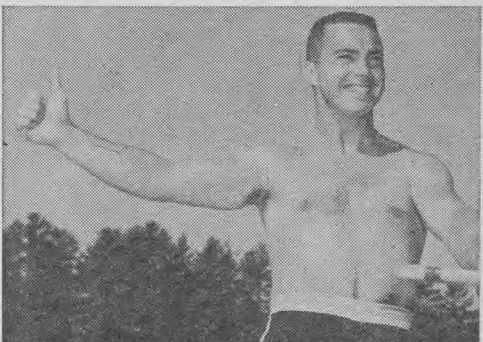
There are rules of the road for water skiers too. In the following column a young water skier illustrates some of the more common water ski hand signals.



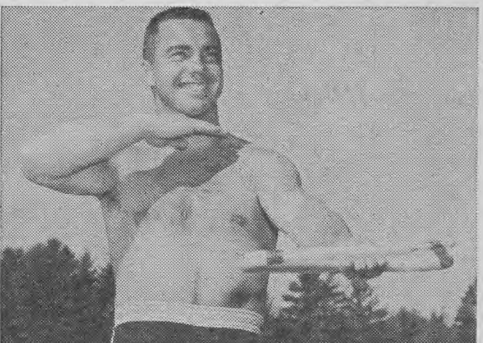
1. Universal OK sign: everything is fine



2. Thumb or palm down: slower speed



3. Thumb or palm up: more speed



4. Arm across chest: cut, skier intends to drop off



5. Palm extended: regular stop signal

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Floor Care

WHAT KIND OF FLOORS and flooring material do you have in your home? Linoleum, asphalt, rubber and vinyl are known as smooth surface flooring materials. Often the best source of information on such flooring, its installation and care is the dealer from whom you purchase it.

Good maintenance keeps new floors attractive and protects their surface. If you clean them regularly it's less likely that grit and lint will become imbedded in the surface and, for most of us, it's easier to give floors frequent care than it is to renew their surfaces after they have become scratched and dull.

It is important to choose equipment that will pick up lint and grit without scratching the floor surface. The smooth floor brush of your vacuum cleaner does a good job. So does a soft hair-broom; on the other hand, a hard-bristle broom may damage it.

For daily cleaning of asphalt tile, rubber tile or waxed surfaces use a broom, vacuum brush or slightly dampened mop. Don't use an oiled mop; it may soften the surface.

Wipe up spilled liquids, especially greasy ones, immediately. They make a floor sticky or gummy and so hold lint. Some liquids react to cause pitting, softening or discoloration.

If you use water to clean floors, keep it to a minimum and follow this method:

- Use cool or warm (not hot) water, or a solution of synthetic detergent, soap or special floor cleaner.

- Scrub or mop a small space (about a yard square) at a time with mop or by machine.

- Wipe up cleaning solution or water.

- If cleaning solution is used, rinse floor with a cloth or mop dampened in clean water, rinse in sections, depending on floor size.

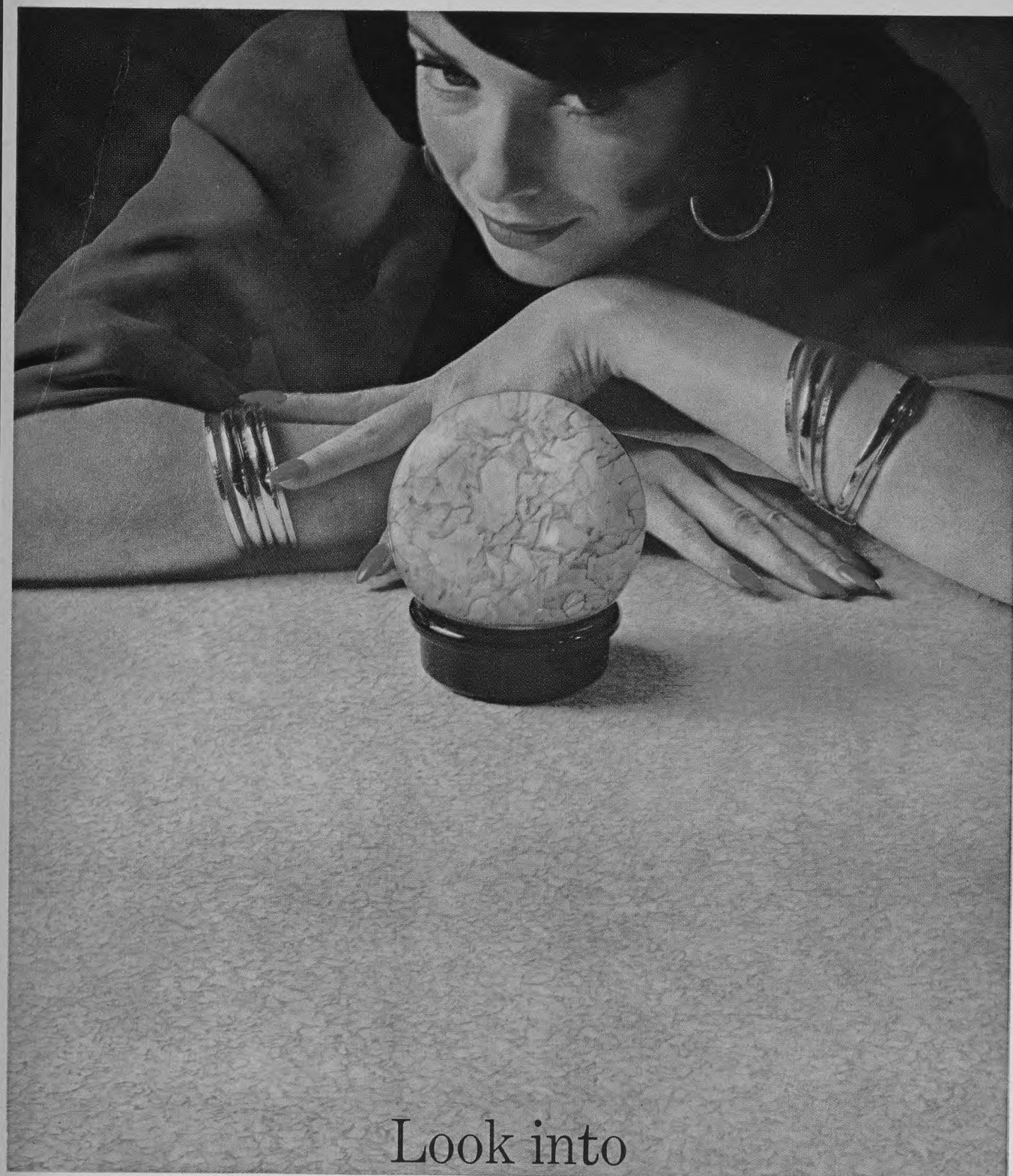
- Wipe up excess water.
- Let floor dry.

Most homemakers face one fairly common housecleaning chore: removing accumulations of old floor wax. Sometimes there is an extra heavy "buildup" of wax, especially around baseboards. In some cases the floor begins to look cloudy and does not respond to polishing. Then it's time to get rid of old wax.

When this buildup of old wax occurs on vinyl, asphalt or linoleum floors, home economists of the Ontario Department of Agriculture recommend an effective cleaning solution that can easily be made up at home. It calls for ½ cup of heavy-duty detergent and ½ cup of ammonia to 1 gallon of warm water.

This solution is good for vinyl, linoleum and asphalt floorings. It isn't suitable for wood floors.

When there has been an extra heavy buildup in corners or around baseboards, dip steel wool into the cleaning solution and rub gently on accumulated wax. ✓



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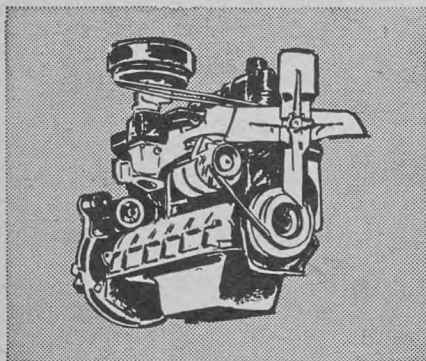
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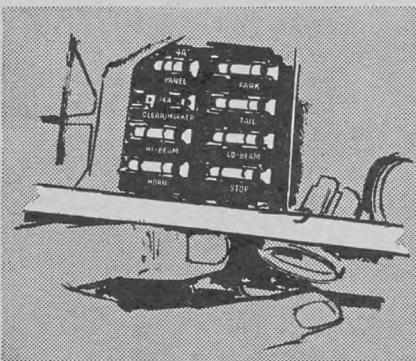


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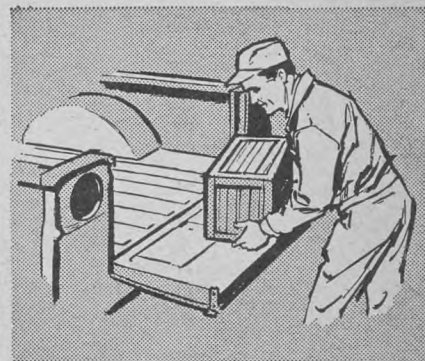
- ☐ Stronger, more powerful engines (V8 or six) have reserve power to protect them from strain.



- ☐ Handy fuse panel is in the glove compartment. Labeled fuses are easy to find, easy to replace.



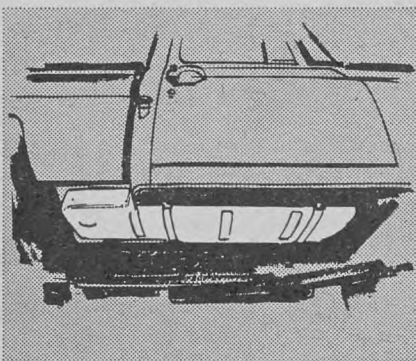
- ☐ Door openings are 4 inches wider. You can swing in and out without banging your knees. Seats are wider too.



- ☐ Tailgates are 3 inches lower to save you miles of lifting. The steel floor can't rot or warp.



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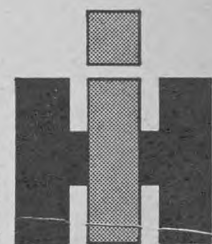
- ☐ We put the gas tank outside to make you safer inside. Outstanding visibility all 'round is another big safety feature.

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[Guide photo]
Leo Piche, president of Regional Parks Association



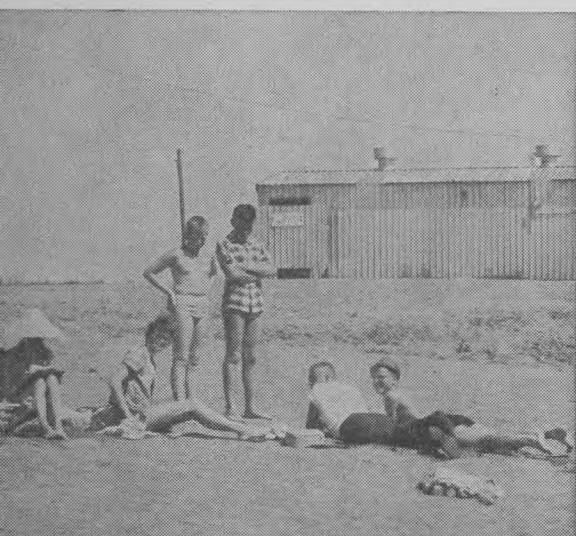
[Sask. Gov't photo]
Float at Thomson Lake

Homemade Summer Resorts

Provincial and local governments and local groups team up in Saskatchewan to provide picnic, swimming and boating facilities. There are 30 parks now, but within a few years there should be one within 40 or 50 miles of every community

by CLIFF FAULKNOR

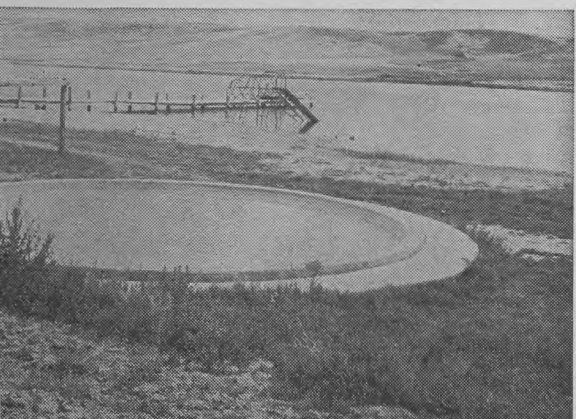
Field Editor



[Sask. Gov't photo]
Local people enjoy the sun on the artificial beach at Thomson Lake Park



[Guide photo]
Alberta tourist tries the Thomson Lake golf course



[Guide photo]
Regional park development at Hazlet, Sask. A spot of green on the burnt prairie

NATURE WENT OUT OF HER WAY to discourage outdoor recreation in Saskatchewan. Up north, where the season is short, are thousands of square miles of lovely lakes, forests and streams, most of them inaccessible to the bulk of the population. In the south, the winds sweep over arid plains and good lakes are as scarce as millionaires at a Communist rally.

But Nature didn't reckon with the rugged determination of Saskatchewan's people. With help from the province's Department of Natural Resources, many communities in the grain-growing regions of the south have banded together to create a system of artificial resort areas. The plan will eventually mean that no community will be more than 40 to 50 miles from swimming and boating facilities.

Local development groups have been incorporated into an overall body called the Saskatchewan Association of Regional Park Authorities. There is even a publication called the "Regional Park News" so that each group will know of the progress made in other localities.

In many cases, the focal point of park development has been a PFRA water storage reservoir. As a matter of fact, the whole idea grew out of a dream of the late Dr. L. B. Thomson, former PFRA director, who urged that all reservoirs be used for both storage and recreation purposes. Because of this, it is only fitting that the first regional park opened in the province should be named "Thomson Lake Regional Park."

Thomson Lake Park is located on the Wood River between the towns of Lafleche and Gravelbourg. The river rises in a height of land which forms part of the divide between the Missouri and South Saskatchewan River watersheds.

The 1,400-foot PFRA dam was built in 1957-58 at a cost of \$530,000. It formed an artificial lake 10 miles long, 1½ miles wide and up to 45 feet deep. The total area covered is about 2,300 acres.

As a result of Dr. Thomson's suggestion, neighboring communities formed the Wood River Co-operative Beach Association Ltd. to develop the site into a recreation area. Land was purchased and thousands of yards of sand and gravel trucked in to turn sections of mudbank into beaches. Roads were graded and graveled, and thousands of trees planted by volunteer labor.

The waters were stocked with rainbow to keep the angler happy.

"You should see this place on a summer week end," said Leo Piche of nearby Gravelbourg, who is president of the Regional Parks Association, "it draws people who live 40 to 50 miles away. In a few more years when our trees have had a chance to grow this will be a very attractive spot."

PARK AUTHORITY IN CHARGE

The Thomson Lake area became the cornerstone of the Regional Parks program in 1961. Like other similar parks it is administered by a "Regional Park Authority," which is charged with the operation, development and care of park facilities. All park bodies are composed of 20 representatives from each of the towns or rural municipalities that make up the Authority. These representatives elect a 7-member executive to run it.

A Regional Parks Act was passed by the Saskatchewan Government in 1960. One of the provisions is that each park authority will operate under a 5-year charter. Financing is a joint endeavor. Forty per cent of the money comes from a levy on the corporate members, and this is based on their distance from the park. The remainder comes from the Provincial Treasury. Last March the Act was revised to allow extension beyond the initial 5-year period where local conditions show that more money or time is needed. In many cases park authorities had no idea what facilities they would need until they had actually opened for business.

As well as giving financial assistance, the provincial government helps with planning, landscaping and any other special problems. An example of the benefits of this assistance can be seen in the Shamrock Regional Park near Coderre, southwest of Moose Jaw. A natural beauty spot, it had long been a popular ground for church picnics. There was a roped off swimming hole in the river, complete with a diving board. But during the summer low water, leeches and an accumulation of algae made it unfit for



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use. Obviously a proper pool was needed, but there was no money for it.

The Regional Parks scheme changed all this. Money was now available to begin excavating. As folks did in the old barn raising days, residents of the area pitched in and completed a modern swimming pool in 35 hectic days.

Said G. G. Rathwell, Regional Parks supervisor, "Without the countless hours of volunteer help, which can't be counted in dollars, the project would never have gotten off the ground."

IN A SMALL COMMUNITY

Like the Thomson Lake project, the regional park near Hazlet in southwestern Saskatchewan is also built around a PFRA dam. Only one rural municipality and one village belong to this park authority. But the authority has hauled \$1,300 worth of sand to make a beach, and has built a cookhouse, bathhouse, and a wading pool. It has also purchased about \$2,000 in playground equipment and stocked the lake with 100,000 pickerel. The \$3,000 annual maintenance tab is handled jointly by the village of Hazlet and Pittville Municipality.

"This park has been a godsend to people around here this summer," Jim Wenz, secretary of the Regional Park Authority at Hazlet, told Country Guide. "There's such a mob out there every Sunday it's hard to find a place to leave your car. Some even do a bit of water skiing on the lake. During the week, quite a few local farmers come down and have a swim after the day's work is done."

There are now about 30 of these rural-developed park areas in Saskatchewan. They can be found all the way from the U.S. border to Canwood, which lies north of Prince Albert. One of the best features of the Regional Parks plan is that each area has a stake in the operation and financing of its own park, yet Provincial money is available so that no project can get bogged down because of a shortage of funds. It has also sparked the sale of outdoor sporting equipment in many of the smaller towns. Many a local storekeeper now keeps a good supply of fishing tackle beside his guns and gopher traps.



[Guide photo

Sheltered camp kitchens invite outdoor dining in Canwood Regional Park. All recreational facilities in the park area are constructed from resource material readily available in the vicinity

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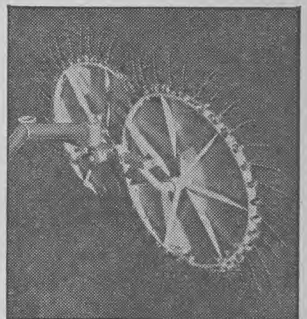
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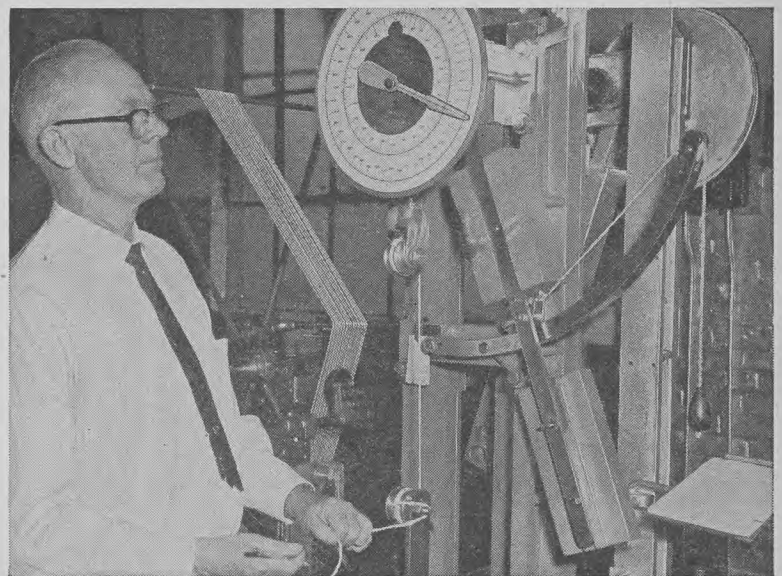
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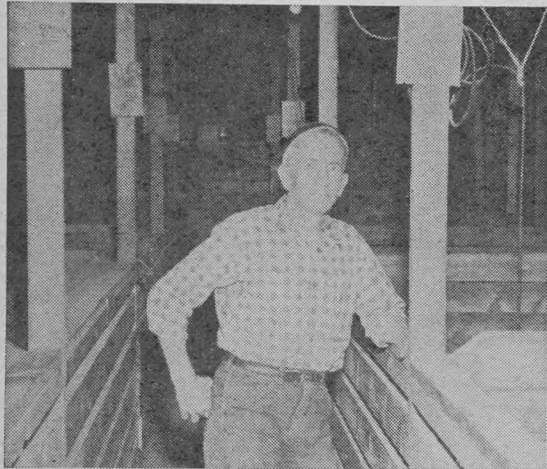
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Hog barn has a center alley with cleaning alleys along each side

An ingenious manure-handling system, and the skilful use of irrigation water enable Chris Hansen to make a living with pigs, dairy cattle and potatoes on his . . .

40-Acre Farm

WHEN A MAN comes from a country that is known for intensive farming he just might have a few ideas about the subject that are worth noting.

Chris Hansen, who farms along the Salmon River road near Salmon Arm, B.C., used to specialize in hog raising in Denmark. In 1952 he emigrated to Canada with his family

and went to work in Vancouver until he could save enough to get back into farming. The Hansens moved to their present location about 3 years ago, where they produce purebred Yorkshire pigs, Jersey cream and potatoes on about 40 acres.

By the skillful use of irrigation water, liquid manure and commercial fertilizer, they are able to raise

all their forage requirements. An 8-acre pasture of mixed grasses and clover is strip-grazed in 3 sections by using a movable electric fence. As soon as the cows have grazed one section, the pasture gets a treatment of both liquid manure and water. This way, the Hansens can keep their 16-cow milking herd on the pasture all summer.

Chris' special pride is his manure handling system which enables him

to give any of his fields a shot of liquid manure whenever they need it. From broad gutters in the concrete floor of his new 26' by 100' insulated hog barn, manure can be washed into a 26' by 12' concrete lagoon located below floor level at the lower end of the barn. Another gutter connects the lagoon with an 8' by 12' by 8' laminated cedar tank which also receives the liquid manure from the cow barn. Solid



Pens have only a thin layer of wood shavings on the floor

[Guide photos]

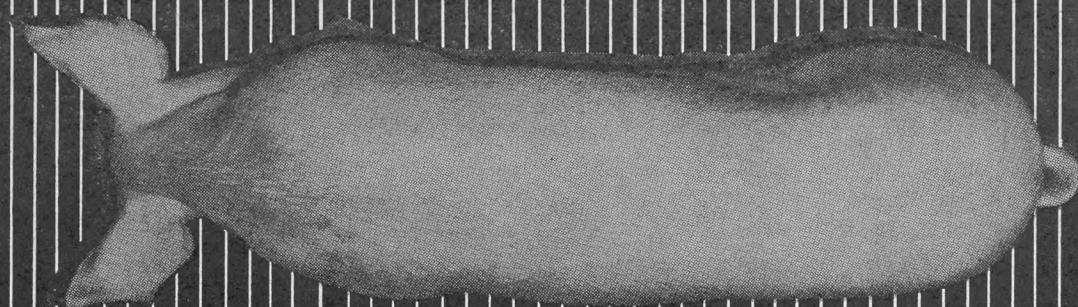
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CUT FEED REQUIREMENTS by up to 50 lb. per hog with the new SHUR-GAIN Limit Feeding Program. Grow better hogs with less feed and pocket the cost of the feed saved.

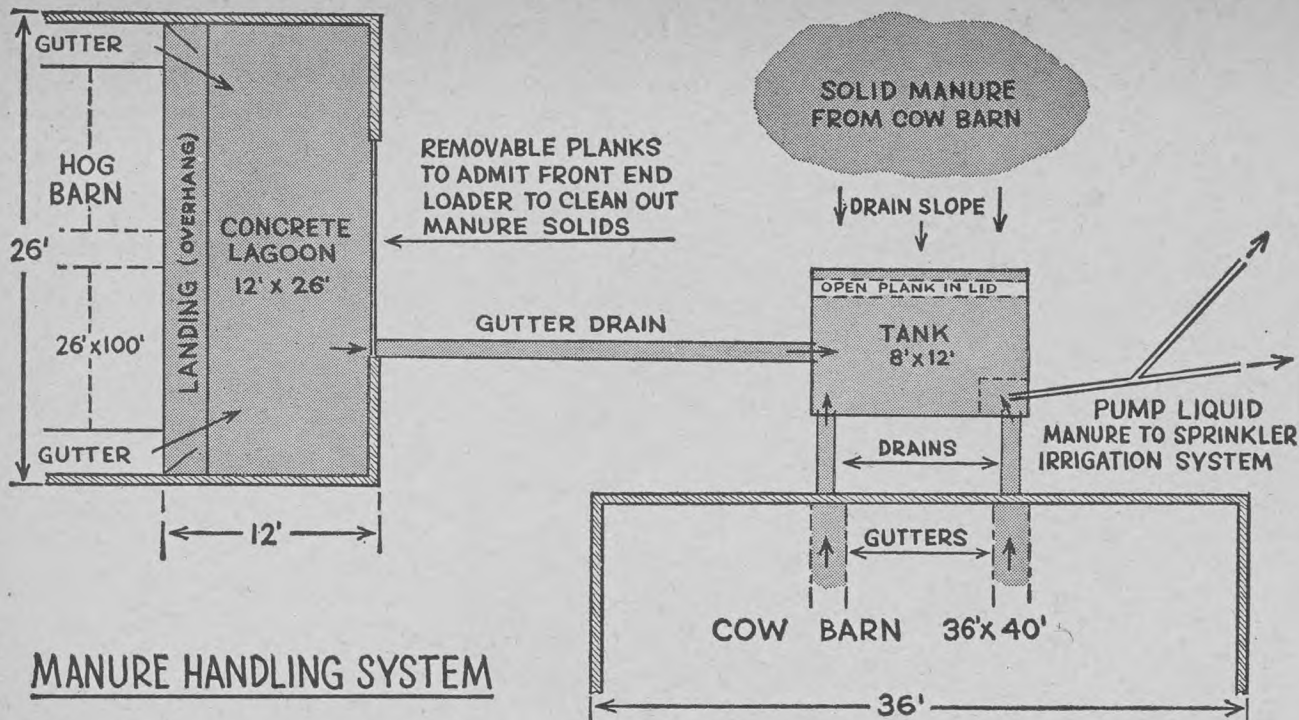
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limit to 5 lb.
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manure is piled just above the collection tank so the liquid draining from it will run down. Drainage is aided by the fact the tank is in a natural depression well below the level of both barns.

When a field is to be treated, the liquid is pumped out of the tank and distributed through the farm's sprinkler irrigation system. As soon as the tank is empty the sprinklers are switched back onto the water line and the fields get a good soaking so the liquid manure won't "burn" the crops.

Along with his 4 acres of potatoes, Chris Hansen grows about 2 acres of sugar mangels for his cows and pigs. The rest of the land provides alfalfa hay for winter feed. Farm by-products such as skim milk and culled potatoes are also fed to the pigs. When a sow is bred, about one-third of her ration consists of potatoes and mangels. Gilts have averaged 8.2 piglets on the first breeding.

Chris is a strong believer in hand feeding so as to control the amount of feed each animal gets. If a sow

leaves some feed, she doesn't get any more the next time around.

"This keeps them from getting too fat," he explained. "It also keeps the sow and her piglets from getting the runs."

It seems to work. Hansen pigs are long and lean for Yorkshires. For butcher hogs, Chris has a "reach up" feeding system which is said to promote muscle development (lean) in the legs and back. This involves raising the feed trough about 2 inches every 2 weeks as the animals grow.—C.V.F.

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Each pen has a water bowl and a manger for calf pellets and hay. A heat lamp is available if needed. Milk buckets are hung on the front of the pen at feeding time



[Guide photo]

Calf Barn with Individual Pens

CHARLIE MUNRO, of Embro, Ont., has given a small obsolete henhouse a new lease on life — he remodeled it into a calf barn. The old structure, measuring 20' x 30', now provides overhead hay and straw storage and 14 individual 4' x 6' pens on the lower level.

"The calf barn," says Munro, "has overcome problems of congestion and the occasional poor doing calf; now we can provide every calf with a better environment."

Most calves are born in the pole barn and are taken from their dams and placed in the calf pens before they are 12 hours old. "This is the most convenient way of handling calves in loose housing," he claims.

Munro lists several advantages for a calf barn with individual pens:

- Calves cannot suck each other.
- Calves are kept on dry bedding and are free from drafts, thereby virtually eliminating such hazards as pneumonia.
- Calves which are off feed, or are scouring, are identified immediately and fed or treated accordingly.
- Calves are quiet, and develop a desirable temperament, which is evident long after they have been removed to other quarters.
- The occasional cow which will not own her calf is no longer a problem — with individual pens it is known precisely what feed each calf has had.
- Each pen can be numbered and a feeding chart can be tacked to the

wall for the guidance of family or hired labor.

• A combination of individual pens and good management means that calves develop without any setbacks.

Scales are used to weigh feed for each calf. The milk buckets are slipped into holders, made from 3/8-inch steel rods, which can be speedily hooked to the front of each pen. Bedding remains drier, and less of it is used, because of the slatted floors. The slatted sections are removed and the pens cleaned when each calf graduates to the community growing pens. At the completion of their 2 months in the calf barn, the calves are completely weaned onto dry feed.

While the primary use of the calf barn is to raise good dairy heifers, it has a secondary use when space permits. Bull calves are fed to vealing weights of some 280 pounds at 12 weeks. Surplus colostrum can be used and a commercial vealer bridges the gap between fresh cows when colostrum is unavailable.

There are many persuasive arguments to be made in the case for a calf barn. The desirable appearance of the calves is the most convincing.

Remodeling costs of Munro's old henhouse were moderate. Hay provided ceiling insulation, and the walls were already insulated with shavings. An 8" x 5" concrete curb was poured against the inner side of the frame barn walls. Asbestos sheets 4 feet high were nailed above the curb. These keep the walls dry and protect the calves from drafts. Similar 8" x 5" concrete curbs were poured around the perimeter of each pen.

These curbs serve several purposes: they keep the wooden partitions out of the manure; provide a ledge for the slatted floors; and give added strength to the metal corner posts imbedded in them.

The posts are made up from two lengths of channel iron welded to a 1 1/8-inch divider; this combination provides three recesses into which the 1-inch partitions can be dropped. These welded combinations provide support for the partitions and for the fronts of the pens. The steel supports at the barn wall are ordinary pieces of channel iron.

The slatted floors are made from 2" x 4" boards laid on edge, with 1" x 3" rough sawed oak slats nailed across.

When Munro switched to loose housing for his dairy herd, some vintage water bowls were surplus. These have been resurrected and a water bowl has been installed in each pen. There is an electrical outlet for each two pens so that heat lamps can be used in severe weather or for the first few days after the calf is born. A small exhaust fan has been installed at one end of the calf barn and air is drawn from the far end of the hayloft. Each pen has a manger box for calf pellets and choice, mow-dried, first cutting hay. —P.L.

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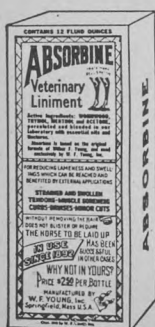
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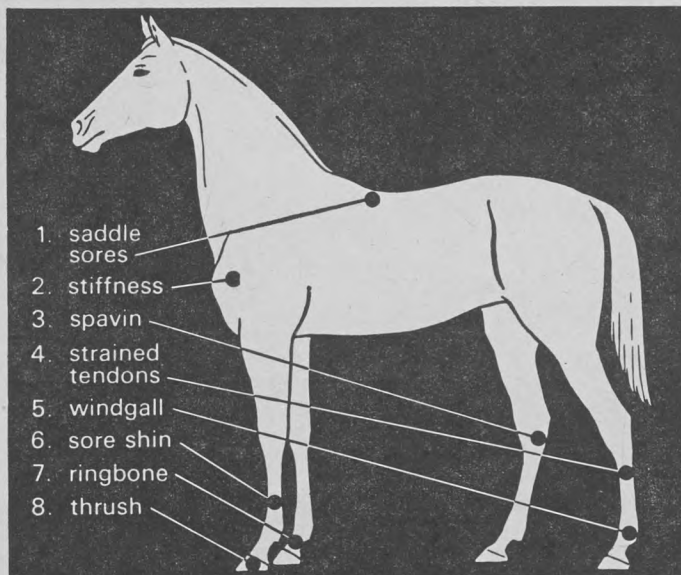


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2. Make available to each Agent other worthwhile jobs to do in slack periods when there isn't much grain to be handled. U.G.G. Agents now sell feed, seed, herbicides, fertilizer, aluminum siding, coal, barbed wire, and other things farmers need. Their prices on some are the lowest in Western Canada. The quality is always high . . . and always backed by U.G.G. itself.

Some U.G.G. Agents even write government examinations and qualify to sell various kinds of property insurance — including hail, auto, fire and theft.

These extra services mean that farmers are coming in to the elevator all year round, even when grain is not moving. And the Agent is able to add a little to his basic earnings, which makes him happier and eager to give you the best service.

3. Give Agents better training. Last year, all U.G.G. Agents attended special training or product education courses. (While they were away from their elevators, either helpers or relief Agents were there, of course). Better qualified Agents will be able to give you even better service, and ultimately they will find themselves earning more.

In the future, farmers will look for improved and faster service at elevators. U.G.G. will continue to raise the standard of service of its Agents.

If you have a son who wants to stay in agriculture, maybe he will make a career for himself managing a U.G.G. elevator. He will be able to put his experience in farming to good use, and earn a respectable living.

One thing is becoming more sure all the time. When you haul to U.G.G., a qualified Agent *will be there**. And he'll hustle.

**U.G.G. Agents don't expect to get grain just because U.G.G. is owned by 55,000 Western farmers. U.G.G. employees must attract grain by giving the best service.*

The Farmers' Company



Suspended Feeders that Move to the Feed

SOME POULTRYMEN like automatically filled auger-type feed troughs, others prefer circular feeders that can be lifted out so pens can be cleaned. Harold O. Stenberg, a VLA farmer near Langley, B.C., has a system which he believes combines the best features of both.

Harold has stayed with the circu-

lar can-type feeders, but he has cut out the handling chores by suspending them from overhead trolleys that move slowly around the outer perimeter of each hen house. Powered by a 1/6 h.p. electric motor which is hooked to a chain drive, the feeders make a complete circle of a 150 ft. by 40 ft. broiler house in 20 minutes. There are about 120 cans per house.

"One reason I prefer this system, to automatically filled feed troughs, is that you have to be there when it's operating," he said. "If anything goes wrong you can fix it. Another advantage is that I always know how much feed I have on the floor."

The feeders move slowly enough so that each one can be filled without having to shut off the motor. As a can moves past a "filling station," Harold fills it from a flexible tube that carries the ration from a storage hopper in the attic by gravity flow. The feed is a specially prepared broiler ration.

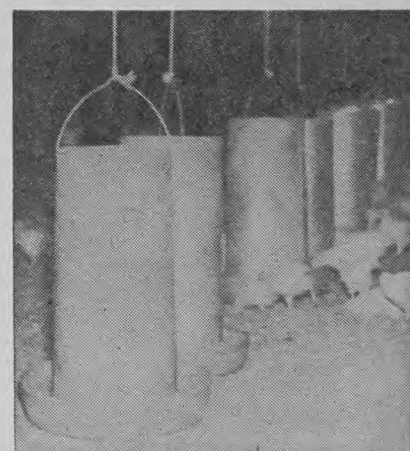
A former member of the Royal Canadian Army Medical Corps, Stenberg has been in the poultry

business for 11 years. He started with 30 birds and has now built up to where he can handle 18,000 birds in his three 150 ft. by 40 ft. buildings.

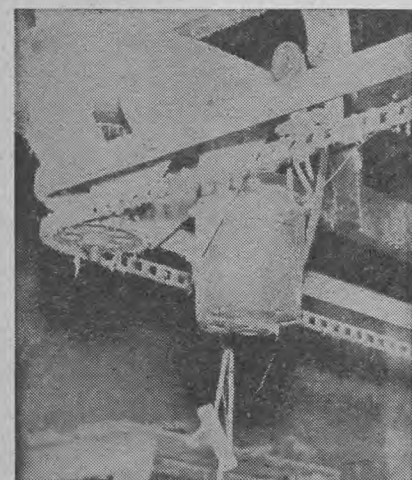
Coast broiler men sell through a producers' marketing board which sets the number of birds they can raise. Quotas are geared to the prevailing market situation. Although a producer can sell his birds anywhere, the deal has to go through the board. The latter handles all the paper work.

Harold would like to see producers in all four western provinces under a single marketing agency so one area wouldn't be able to compete with another.

"Before we got the board we were giving our birds away," he said.—C.V.F. ✓



A line of suspended feeders



Electric motor and drive chain that powers the trolleys



Filling up at a "filling station"

successful
feeders
across
Canada
choose

MIRACLE

ALBERTA:



Recognize curler Hec. Gervais? He's as much at home among his 20,000 broilers at his St. Albert, Alta., farm as he is on the curling rink—and as successful.

Hector Gervais has built up his broiler business to 20,000 broilers in five years. As in curling competition, he's in it to be successful. His strategy is good sound feeding practices. Results...3.7 lbs. at eight weeks and two days. He's used other feeds, but prefers the results and service he gets from "Miracle"



Horticulture

Proper Sprays Protect Peaches

BACKYARD peach growers can control leaf curl on their trees by thorough spraying before peach buds swell says Prof. C. B. Kelly, of Ontario Agricultural College, Guelph. He recommends the treatment of such trees with lime sulphur or Ferbam. Liquid lime sulphur is available in small quantities and should be used according to the directions on the label.

"Ferbam fungicide is also very effective against the leaf-curl fungus," he says. It, too, is available in small packages in powdered form and should be used according to directions.

Prof. Kelly recommends that spraying be done on a day that will permit rapid drying of the fungicide to achieve a thorough coating of buds and bark. Should rain fall before the spray dries he suggests a second application. ✓

New Tomato Good Processor

INTRODUCED to the seed trade this year is a new tomato from Lethbridge. Responsible for its development is Dr. G. A. Kemp, horticulturist at the research station. Earlicrop is its name. It is expected to come closer to the requirements of the processing trade and will also fill a need for the fresh market.

It is similar in most characteristics to Early Lethbridge but is much heavier yielding and several days earlier. Earlicrop has high color, firm fruit and excellent flavor. The fruit is about 2¼ inches in diameter.

This variety can fit well into the home garden and will fill a useful place in the fresh trade, says Dr. Kemp.

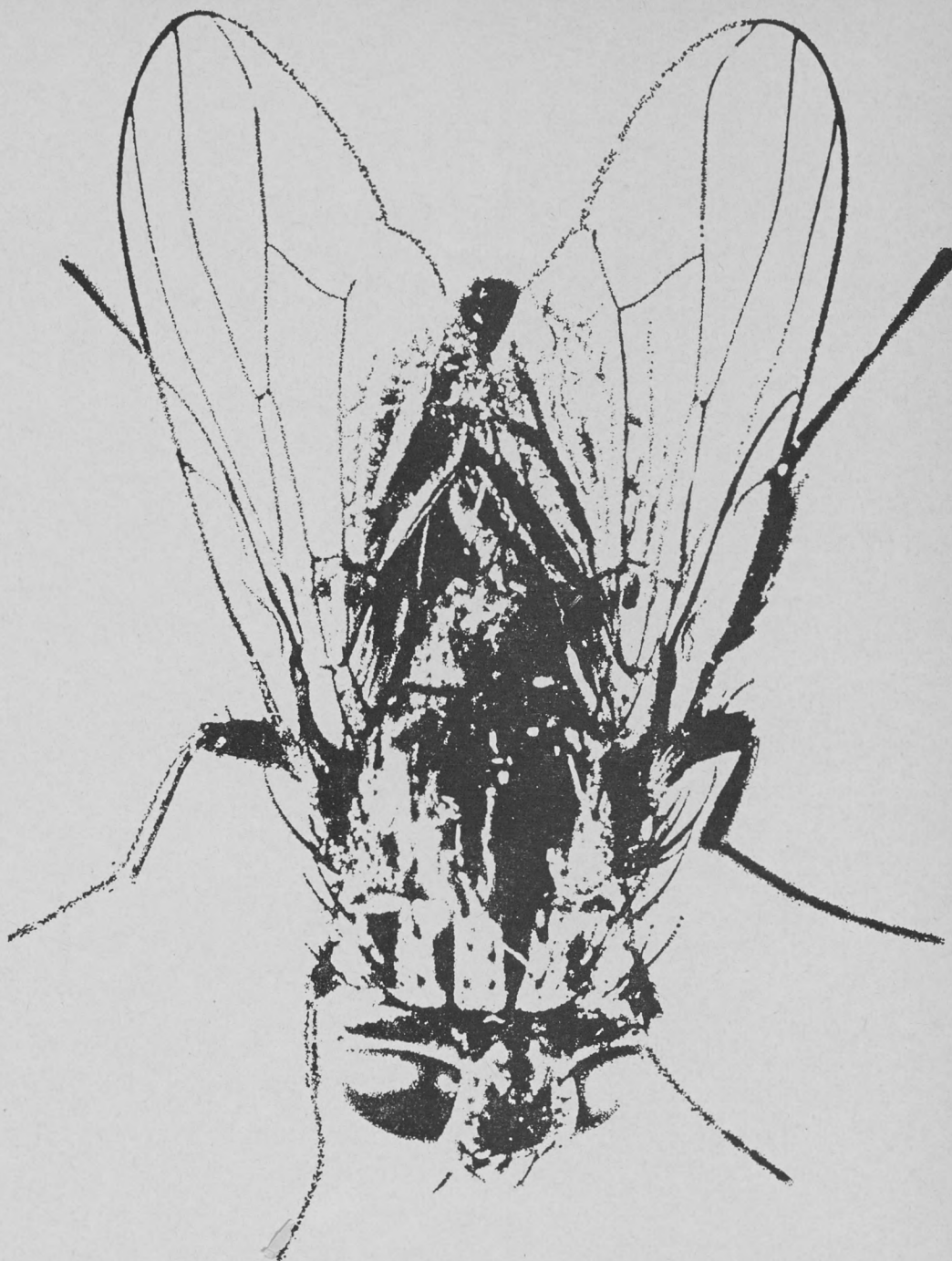
Earlicrop has resulted from a cross between Bounty and Early Chatham that was carried by the station for 15 years before naming and releasing it to the seed trade. In 1963 it was released for testing to agricultural institutions across Canada and on the basis of the 1 year's trial has been well accepted. ✓

Spray Soon for Apple Maggot Flies

SPRAY APPLE orchards for apple maggot flies before July 15 says the Apple Maggot Control Board. A second application should follow 10 to 14 days later.

As a control spray the board recommends the use of 3 pounds of arsenate of lead or calcium arsenate per 100 gallons of water. The effectiveness of the spray will, of course, depend on the thoroughness of application and the timing of the sprays.

Unsprayed apple trees provide ideal breeding grounds for the flies. For this reason the board suggests spraying all apple trees whether they are bearing fruit or not to prevent attacks by this pest. ✓



Read how just one spray of CYGON® can control flies for 8 weeks or longer

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3. Cygon's 8-week-or-better single spraying

can save you one-third on the cost of lower-priced insecticides that have only a few days' 'killing power'. You don't lose time on other farm chores through repeat sprayings — and time is money.

4. Get Cygon in either the 16 oz., 32 oz., or gallon size from your pesticide dealer. You'll be hours (and dollars) ahead in fly control this year. And remember: Cygon comes from Cyanamid.

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403—Big Western favourite



303—Exclusive full-width threshing



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I once tried to sell
an Irishman some hay.
He sold me a horse
instead, and added:
"You'll not be after
sellin' the hay now."
The deal left no regrets
—a farm without an
unnecessary useless
hayburner is like a
mower missing a
knife guard



[Guide photo]

A Bonus for Farming

*Peter Lewington says we are in
danger of enjoying a lot less living*

THE MOURNERS ARE READY to bury the family farm. It is no longer fashionable to regard farming as a way of life. Now it is the survival of the fittest. Farming has become a complex, specialized and highly capitalized business.

Drain the swamps! Clear the woodlots! Spray those fence rows! More land, more equipment, more stock — and more credit!

In this headlong pursuit of the ideal modern farm we are in danger of enjoying a lot less living — and living things are what make farming worthwhile.

If farming is a business, it has to endure the hazards which make it appear a very unbusinesslike venture: that late spring frost which nips the setting fruit; the hail that strips the ripening grain; the drought that sears the pasture; the rain that soaks the curing hay; the vicious bolt of lightning that cuts down a promising heifer; the perverse old sow who

rolls on the piglets which were destined to pay the taxes.

If farming is a business, it must have a balance sheet. And there are many obvious credits: the ewes that vie with each other to produce twins; that faithful old brood cow who presents you with a dairy heifer each year; the gentle, timely showers which fill the grain; the perfect "catch" of new seeding which gives succulent high protein hay; and the unexpected buyer who appears to take the hay surplus to distant parts, far to the south where no one can recall what a good crop looked like.

These are the tangible benefits and in most years they outweigh the setbacks. These are some of the things which make the family farm indestructible; the things that permit a business to also be a way of life.

And on the rare occasion when our worst fears are justified, there is the promise of another year. ✓



There are also days
when the land is
too wet to work and
the pond yields some of
its infinite variety

[Guide photo]

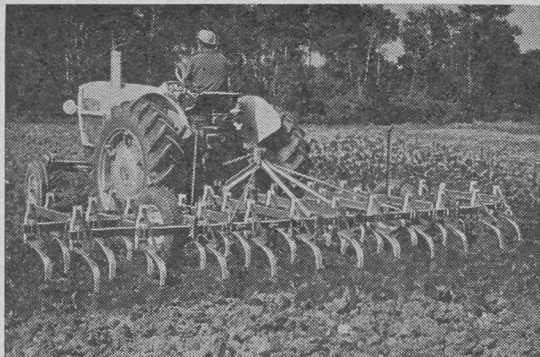
The deer that sneaks in
and nibbles off some
wheat repays its
stolen meal with
effortless leaps over
the fences in the still of
the early morning as
the milk cows are
rounded up

[Ont. Lands and Forests photo]



Soils and Crops

Swift Current scientists say: "Start summer-fallowing as soon as you can get on the land in the spring and never let the weeds get more than 2 inches high during the year"



Start Summerfallowing Early

THE FORMULA FOR a 15-bushel wheat crop on the dry prairies can be 10.5 inches of rainfall plus water stored in the soil. Every inch above this that you can save, will increase your yield by 3 to 5 bushels until you hit the 30-bushel mark.

Swift Current scientists worked out this estimate after 22 years of research. Now they've gone a step further and tested a summerfallow schedule that will save some farmers in the drier parts of the prairies an extra inch or so of water.

The system: start summerfallowing as soon as you can get on the land in the spring and never let the weeds get more than 2 inches high during the year.

They did this at 11 locations in southwestern Saskatchewan. They got four more bushels from wheat following early - worked summer-fallow than from wheat after late fallow (tillage started June 15-2 to 3 weeks after seeding).

The number of tillage operations varied from year to year according to rainfall, weeds, and the effectiveness of cultivation. The land was worked an average of 3 or 4 times a year with early tillage and 2 or 3 times with late tillage.

As was expected, more operations were needed in wet years than dry years. In wet years, such as those from 1951 to 1955, up to 5 operations were needed with early tillage. In dry years (1949, 1957-1959), only 1 or 2 operations were required.

The Swift Current people varied the implements they used according to the soil moisture, growing conditions, trash cover, and weeds. Each implement was adjusted to suit the working conditions.

- They found that disc implements did the best job of killing weeds but if the trash cover was light, the disc sometimes buried it and the exposed soil tended to drift.

- Blade implements conserved the stubble best but didn't always do a good job of killing weeds. Also, they often left the soil too loose for a seedbed the following year.

- Rodweeders and cultivators with rodweeder attachments conserved the trash cover well and were effective at killing weeds.

By picking the implement that best suited the working conditions,

the researchers found they had used cultivators and blade implements 50 per cent of the time, disc implements for 37 per cent and rodweeders for 13 per cent of the time.

Some people will argue: "Won't the extra cultivations cause more moisture loss than small weeds?"

"No," says N. A. Korven, one of the Swift Current researchers. He explains: "The soil moisture that we try to conserve lies below the 4- to 5-inch level. As long as we work no deeper than 4 inches, we won't disturb the amount of moisture below."

Korven deprecates the long-held idea that moisture moves by capillary action from lower to upper layers of soil.

"It has little practical effect under dryland conditions. That top 4 to 5 inches can be effectively isolated from the rest of the soil. As long as we kill the weeds before their roots get below the 4- to 5-inch level, the amount of subsoil moisture won't decrease."

(An interesting sidelight: Swift Current has results that show a $\frac{3}{4}$ -inch rainfall will only wet the soil down to about 4 inches. This moisture is of no value to the subsoil unless another rain falls before the moisture in the top 4 inches has evaporated. In the summer, the top 4 inches will dry out in about a week.)

Working on this theory, the Swift Current workers destroyed weeds as soon as they emerged on the early tilled fallow. The first operation was started before or at the time of seeding.

The late-tilled plots weren't worked until mid-June. By this time the weeds had penetrated below the 4-inch level and a good deal of the reserve moisture had already been lost.

At seeding time, the average depth of moist soil was 36 inches on land that had been early fallowed the year before, but only 29 inches on late fallow. Another benefit: wheat on the land following early fallow had fewer weeds to compete with.

The scientists found that wheat yields were higher on land tilled early at all test sites. For the 72 tests, the average was 4.1 bushels per acre.

V

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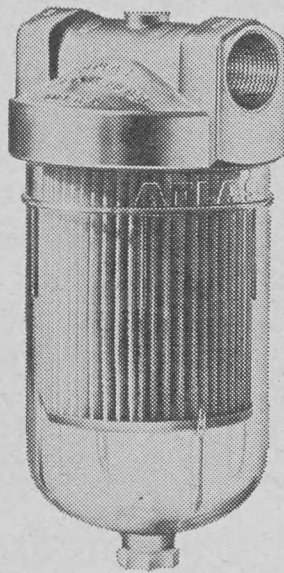
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More Fertilizer Will Pay

For most profitable production, three to four times more fertilizer is required, says Dr. Ken Pretty

FERTILIZER plants and bulk mixing facilities have been popping up in parts of Canada like mushrooms. Fertilizer bills will hit \$100 million this year. Dr. Ken Pretty of the International Potash Research Institute put the use of fertilizers in some perspective in a talk given in Ontario recently.

"Increasing numbers of farmers,

whether through economic pressures or a simple awakening to the opportunities they are missing, are seeking to upgrade their levels of production and income," he said. "The unprecedented quest for information on improved crop production practices being displayed by Canadian farmers is heartening. However, there is a large gap between present

Soil fertility studies, such as these with sheep at the Lennoxville Experimental Farm, Quebec, show that pastures represent a huge untapped potential for increased production



[Guide photo]

production levels and what research has shown to be practical and possible.

"In spite of continued growth in the use of fertilizers on Canadian farms, which is reflected in a 55 per cent increase in the sale of mixed fertilizers and fertilizer materials in the 10-year period ended June 30, 1963 (and a 95 per cent increase in total nutrient content—a reflection of the trend toward more concentrated sources) fertilizer consumption in this country is still in its infancy. If the amounts required to sustain optimum crop yields are calculated, then it is evident that present consumption is only a fraction, certainly less than one-quarter and probably closer to one-tenth of that needed. Ontario used 56 per cent of all the mixed fertilizers and 27 per cent of all the materials for direct application sold in Canada last year, for a total consumption of almost 572,000 tons. An analysis of present needs in the province suggests that for most profitable crop production three to four times as much plant food would be required.

"Crop yield statistics in Ontario

suggest three important facts. First, the greatest gain in upgrading yields has been achieved with cash crops such as corn and potatoes where emphasis has been given to nutrition. Second, yields of all crops are less than half of what research and our best farmers have shown to be possible. Third, hay represents a tremendous potential for improvement. If we include seeded pasture, we find that here are two crops (in Ontario alone, they account for 60 per cent of improved farm acreage) that are producing at no more than one-third capacity. They represent a large untapped potential for increased production.

"Even if all the plant food now sold in Ontario was applied to these forage acres in the province, they would not be producing at their capacity. Similar conditions prevail across Canada, which makes one wonder how long farmers, in a country where 60 per cent of agricultural income comes from livestock products, can allow this degree of inefficiency to persist and still remain competitive."—P.L. V

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Leo— New Hardy Trefoil

A PROMISING new trefoil variety is on the way. Don't expect adequate seed supplies before 1967, but watch for the field trial results. This new winter-hardy variety may be just what is needed for millions of acres of shallow or wetter lands which won't support alfalfa. According to Ross Greenshields who is in charge of forage crops for the Canada Department of Agriculture, "Twenty million acres in Alberta, Saskatchewan and B.C., which are now mostly in poplar bush, have a pasture potential. Trefoil will extend the acreage to wetter areas where alfalfa gets killed out."

Similarly, there are large tracts in Ontario and Quebec where a hardy trefoil would be advantageous for both pasture and hay.

"Leo" trefoil shows every indication of filling the bill. Dr. John Bubar of Macdonald College, who developed this new variety, explains with tongue in cheek, "I found it!"

Finding a new variety is rather more complex than finding a dollar bill on the street or some mushrooms in the pasture field. Back in 1954, Bubar began scouring the world for trefoil seed samples. Winter survival was a key to plant selection. A species, later dubbed "Leo," from the Institute of Plant Industry, Lenin-

grad, U.S.S.R., most nearly filled Bubar's requirements for a hardy and high producing trefoil.

On the debit side, trefoil has lower seedling vigor; it is sensitive to competition; it is a slow starter in the spring; and it doesn't bounce back after grazing. On the credit side, it has not been known to cause bloat and under favorable conditions it will outlive other legumes.

"The secret for good stands," says Bubar, "is early spring seeding. If a nurse crop of oats is sown, graze the oats before they become too vigorous; if they are allowed to shade the trefoil seedlings, they will reduce yields. At Macdonald we have had trefoil in the second year yield as well as alfalfa, but 3 acres of trefoil are normally needed to equal 2 acres of alfalfa." Winterkilling can radically change this and make trefoil far more competitive.

Trefoil is frequently thought of as a pasture legume, but Bubar believes that it should be grown as a hay crop too. For hay production, he predicts that Leo will replace Empire. Leo not only has less winter injury, but it extends the trefoil potential northwards and equals or exceeds both Empire and Viking in yield. Once winterkilling becomes a factor, Leo asserts a significant lead over older trefoil varieties. The key to the persistence of Leo lies in its habit of developing a strong root growth in the fall.—P.L. V

Management

Credit Needs to Rise

WITH FARMING costs continuing to rise, it is not surprising that more and more attention is being given to farm credit. Federal Agriculture Minister Harry Hays has indicated to the House in Ottawa that he intends to increase the lending powers of the Farm Credit Corporation. He plans to increase the amount of authorized capital by 50 per cent to \$24 million and to increase the borrowing power of FCC to \$600 million. The limits for individual loans will be doubled, to \$40,000, or to \$55,000 for supervised loans covering both land and equipment.

It's a sign of the times. Farm enterprises using \$75,000 or \$100,000 worth of capital used to be rarities. Now they are becoming commonplace. But there is no sign of the demand for credit slackening off. In fact an official of the Farm Credit Administration in Washington recently stated, "Those who are amazed at how much money it takes to run a farm these days, probably haven't seen anything yet."

This expert predicted that the non-real estate debt of U.S. farmers will double by 1973. He noted too that the growing need for credit exists despite a continuing counter trend — a decreasing number of farms.

Meanwhile, in this country, provincial governments are dealing with the problem as well.

Ontario's farm account books indicate that the investment per man in farming runs in the neighborhood of \$30,000. As a result, a series of meetings dealing with farm credit problems is being held by the Ontario Department of Agriculture in key centers of the province. Specialists at these meetings will

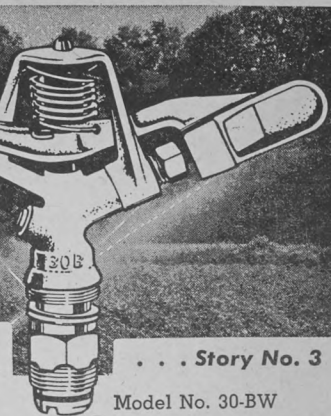
discuss conventional loans on real estate, government farm assistance loans and intermediate and short term credit, as well as loans from banks, trust companies, and credit unions. Merchandise and sales credit will be covered, too. The dangers and pitfalls of an ill-advised credit program will also be discussed as well as the cost of credit and other credit terms and conditions which could result in financial difficulties for a farmer. ✓

SPRINKLER PRESSURES



Performance Chart No. 30-B Sprinkler
Best Pressure Indicated by Black Line on Chart




Nozzle Pressure P.S.I.	Nozzles 5/32 x 3/32-7°		Nozzles 11/64 x 3/32-7°		Nozzles 3/16 x 3/32-7°		Nozzles 3/16 x 1/8-20°		Nozzles 13/64 x 1/8-20°		Nozzles 7/32 x 1/8-20°	
	Diameter Feet	Discharge G.P.M.	Diameter Feet	Discharge G.P.M.	Diameter Feet	Discharge G.P.M.	Diameter Feet	Discharge G.P.M.	Diameter Feet	Discharge G.P.M.	Diameter Feet	Discharge G.P.M.
35	87	5.71	90	6.57								
40	88	6.11	92	7.03	96	8.07	96	9.48				
45	89	6.48	93	7.46	98	8.57	98	10.1	101	11.3	104	12.7
50	90	6.84	95	7.87	100	9.04	100	10.6	103	11.9	106	13.3
55	91	7.17	96	8.25	101	9.46	101	11.1	104	12.5	107	13.9



... Story No. 3

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Farm-Sized Ultrasonic Device

A PORTABLE ultrasonic device has been developed. Ultrasonic equipment for measuring the fat and lean tissue in live animals and carcasses has been used by researchers for the past few years but previous devices were too bulky and elaborate to be easily moved.

The new unit is about the size of a small tape recorder. It could help hog and cattle breeders to find out if their animals are too fat, without slaughtering them. Short pulses of high frequency sound are transmitted through an animal's skin and various layers of tissue underneath. The reflection of the sound waves back to the machine is calibrated and shown on a dial as a measurement of tissue thickness. ✓

Animal Science Laboratory

The Alberta Government intends to build a new animal science building at the Vermilion Agricultural and Vocational College. ✓

In farming, as in any other business, the need will arise for ready cash to finance improvements to property or buildings, for the purchase of equipment, or for some other useful purpose. At such a time a *Farm Improvement Loan*, arranged through the Royal Bank, is often the simple answer. Loans are available up to \$7,500. Repayment can be arranged by convenient instal-

ments. Interest rates are low. For details ask for our booklet "Farm Improvements Loans" at any branch.

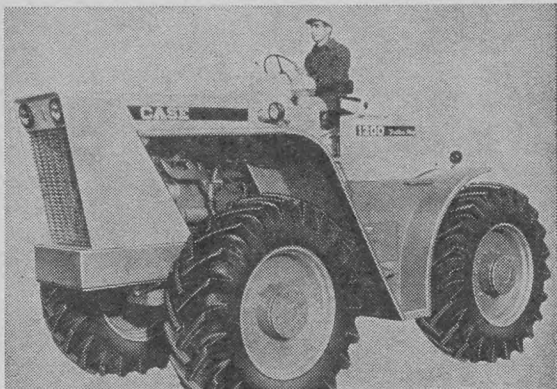


ROYAL BANK
RB-62-6

What's New

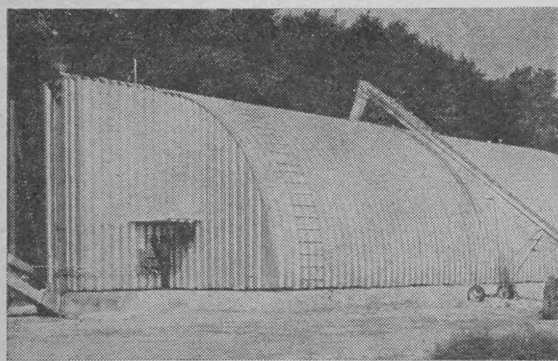
Four-Wheel-Drive Tractor

This new four-wheel-drive tractor has equal power in all four wheels for full 8-plow capacity. It has four different types of steering: front wheel steering, rear wheel steering, crab steering and coordinated (front and rear wheel) steering. These steering features permit greater maneuverability, and precision control. (J. I. Case Co.) (464) ✓



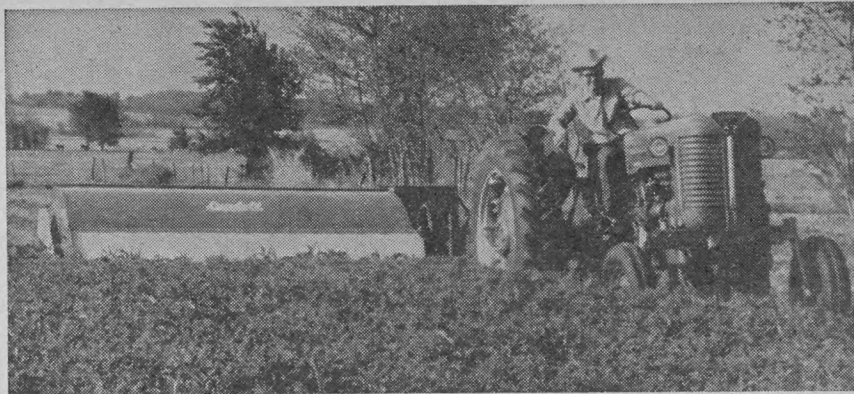
New Silo

This new oxygen-free silo is a quonset-style building prefabricated from aluminized steel and lined with resin. It is available in 600-, 900- and 1,200-ton capacities. It operates on the fact that CO₂ is heavier than air. A conveyor system running along a trough through the center of the build-



ing, unloads the forage. A large cutter arm, resembling a chain saw in action, drags the forage into the trough. The silo can be easily filled with an ordinary farm elevator. (Behlen Manufacturing Company) (465) ✓

Versatile Hay Machine



This new hay machine will mow, condition and windrow in one operation. It has a wide variety of other uses too, including stalk shredding, field mulching, pasture clipping, and residue pulverizing. (Lundell Manufacturing Company) (466) ✓

All-Wheel Drive

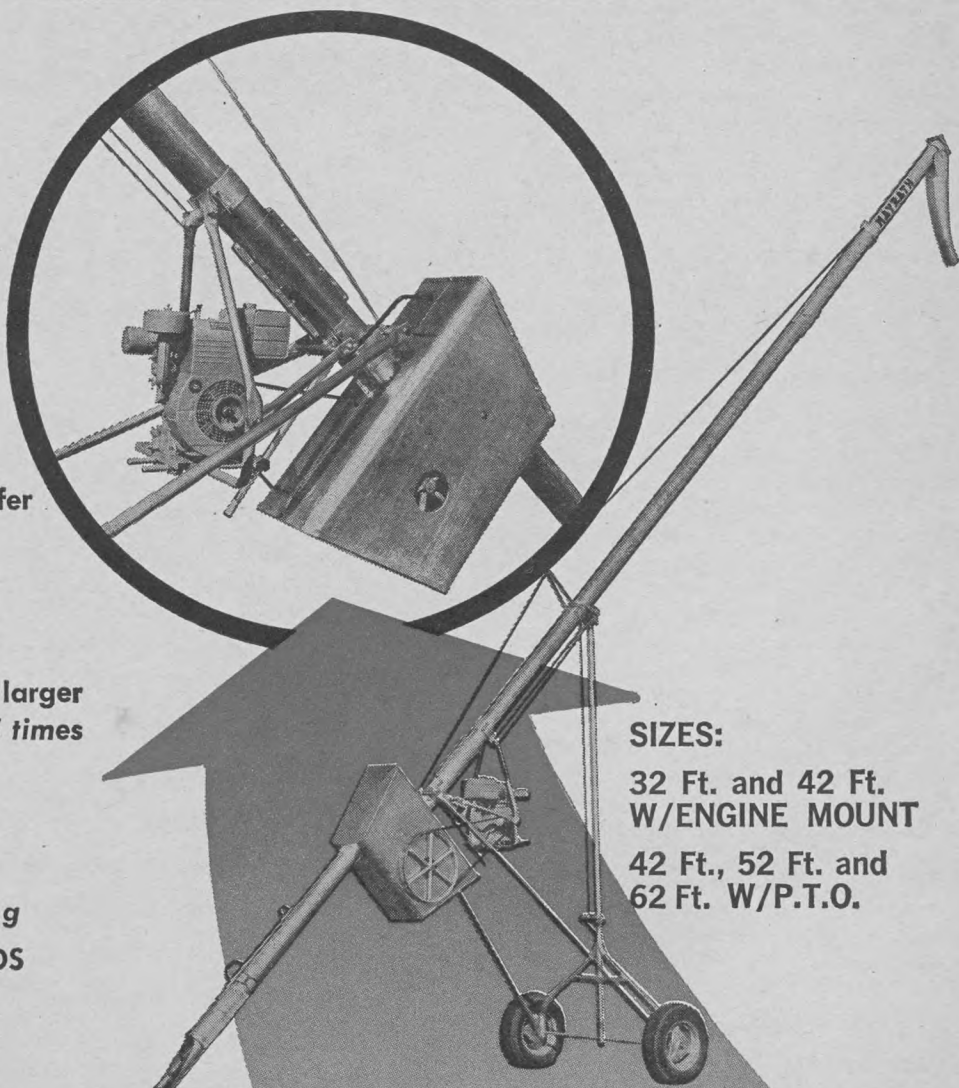
All-wheel drive is now being offered by International Harvester Company of Canada on its high powered model 706 and 806 tractors. All-wheel drive is to provide additional traction, which is a definite advantage when operating in loose soil conditions. (International Harvester Company of Canada Ltd) (467) ✓



For further information about any item mentioned in "What's New," write to WHAT'S NEW, Country Guide, 1760 Ellice Ave., Winnipeg 21, Man. Please quote the key number that is shown at the end of each item.

NEW! COMPACT CENTER DRIVE AUGER

- ★ Fully enclosed drive, assembled before shipping
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- ★ More capacity per horsepower
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- ★ 32 FT. W/ENGINE MOUNT — \$299
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- ★ Move ground feed, flax, flour or dirt with no leaking
- ★ SEVERE TESTS IN GRAIN AND ON ROUGH ROADS
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Globelite



tractor tips

"Injection Pump Systems"

Like the human heart, the "injection pump system" on tractors is what gives it "go". To protect this part, great care should be taken to keep fuel oil from getting dirty or absorbing water. A good tip is to keep fuel oil in overhead water tanks.

And for dependable battery service insist on Globelite

"The Battery Built for Canada's Climate"

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Fergus, Ontario

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300 AMP. POWER-LINE WELDER



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A 10 H.P. transformer operates the COMET 300 easily (only 54 amp. line draw). Heavy air cooled windings do not require a fan, so there's no danger of burn out from faulty or stopped fan. 5 year guarantee. Built-in static booster. Let me send you full details.

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Workshop

Metal Remover

To remove metal objects such as nails, short bits of wire, etc., from passing through a grinder I placed a small metal spoke wheel flat in the hopper of the grinder. Over the spokes of the wheel or pulley I hung several magnets from old tractor magnetos. These will remove most, if not all of the metal from grain before it gets to the burrs. — W.L., Alta.

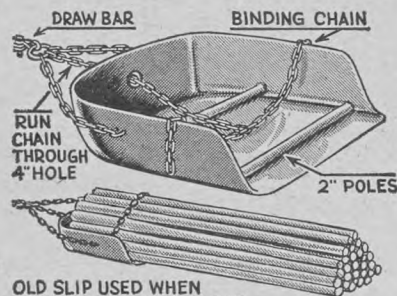


Oil Saver

If water has become mixed with a can or tank of kerosene fuel oil or motor oil, separate it by putting the can outside on a night when the temperature is below freezing. The oil will pour off leaving the water in the form of ice in the bottom of the can. — P.J.O., Sask.

Log Hauler

Take an old slip and remove the iron frame used to pull it and replace with a chain with a large ring in the center. This is to allow several other



OLD SLIP USED WHEN LOGGING PREVENTS LOGS FOULING ON STUMPS, ETC.

chains to go through. Cut a hole about 3 1/2-4 inches in diameter about half way up and in the center of the back of the slip. Place the logs in the slip and put the chains around them and through the hole in the back of the slip and through the ring on the other chain and hook to the tractor. The chain that hooks to the slip should be just long enough to allow the tractor to turn. Pull the chain tight and take up all the slack up to the chain with the large ring. This helps to keep the slip behind the tractor. — F.J.W., Alta.

Handy Scraper

A handy scraper for scaled paint or smoothing surface before painting can be made from a sickle blade or a section of mower cutter bar sharpened on all three sides, a hole drilled in center, and fastened to a 3-inch rod as shown. — I.M., Ont.

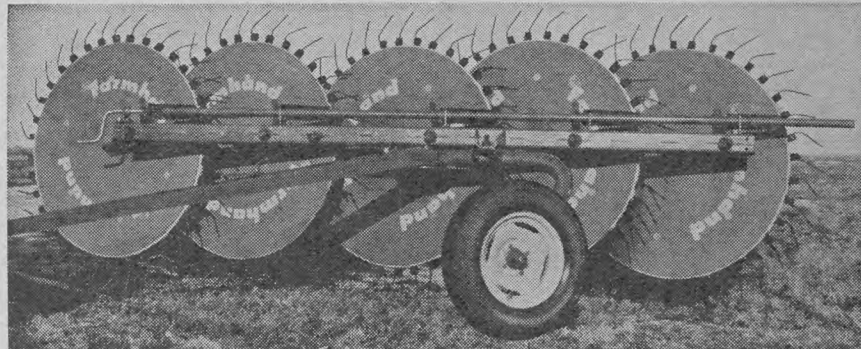


Bending Pipe

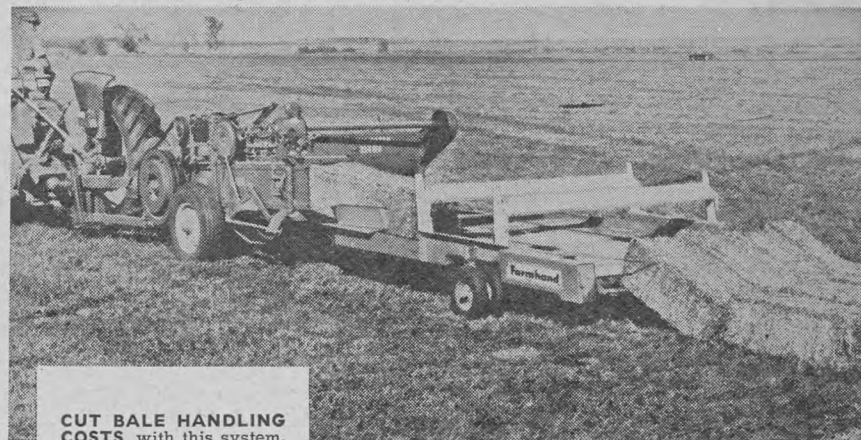
An ordinary hollow pipe filled with sand and corked at both ends can be bent easily to any desired position. Such pipe is useful for porch railings. Apply aluminum paint. — P.J.O., Sask.

Handling Hay to Moving Soil... FARMHAND gives you the best tools for the job!

BALES OR LOOSE HAY, no other system is as complete as Farmhand. Slash haying labor costs by mechanizing with the one that fits your needs best—your Farmhand Dealer will help you select it.

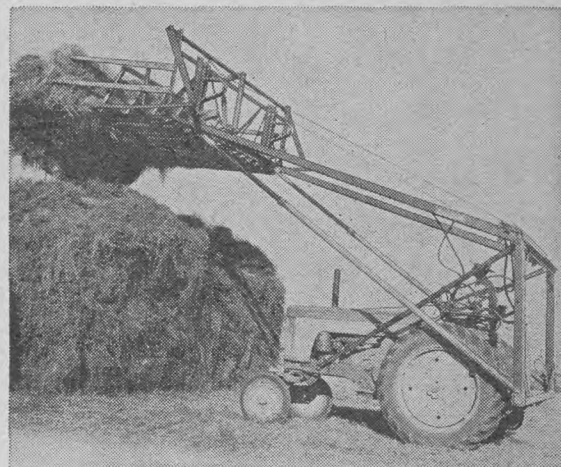


RUGGED NEW F-5 RAKE has all the gentle hay handling at high speed of other Farmhand wheel rakes — but adds new extra durability, extra adjustability. Basic five-wheel model becomes six- or seven-wheel model with extensions. F-7 model has seven wheels, takes extensions too. Swaths 7' to 11' plus tandem and "Y" options.

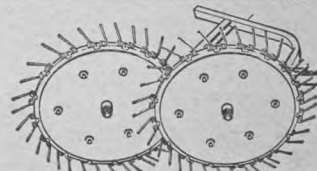
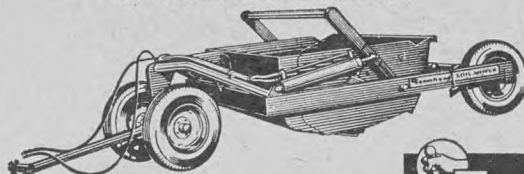


CUT BALE HANDLING COSTS with this system. Bale Accumulator trails baler, automatically deposits tight eight-pack. Power Bale Fork on F-10 or F-11 Loader picks up eight-pack for wagon loading or stacking. One man can do the job — and never touch a bale with his hands!

CUT LOOSE HAY HANDLING COSTS with the F-10 Loader and big 12' Hay Basket. Sweeps windrows at top tractor speed, stacks to 27' high with Push-Off. Add a Grapple Fork for feeding out of stacks — tears out 1/2-ton at a time, even from frozen stacks. Most efficient way ever for handling loose hay!



MODEL 25 SOIL MOVER lets you level, ditch, fill, grade, build dams and terraces in fast time. Specially positioned blade takes 72" cut, fills with less power than other 2 1/2 cu. yd. units. Dumps or spreads to rear. Requires 4-plow tractor.



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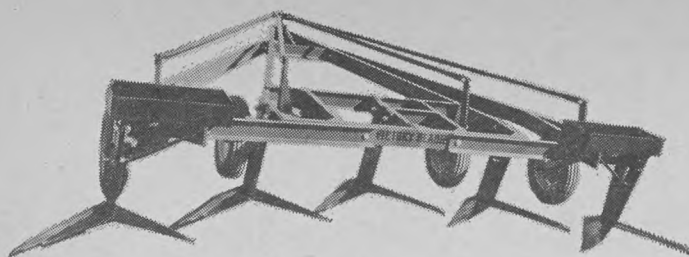
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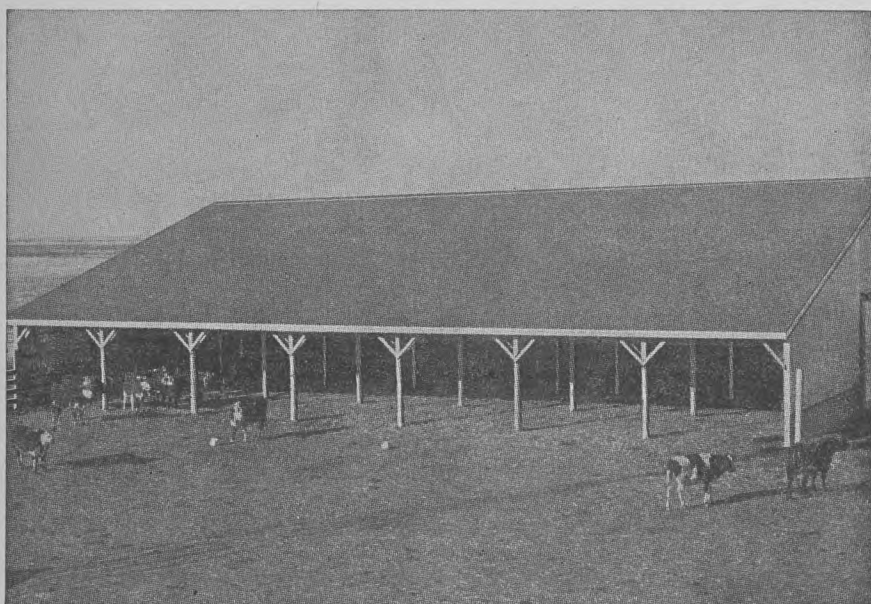


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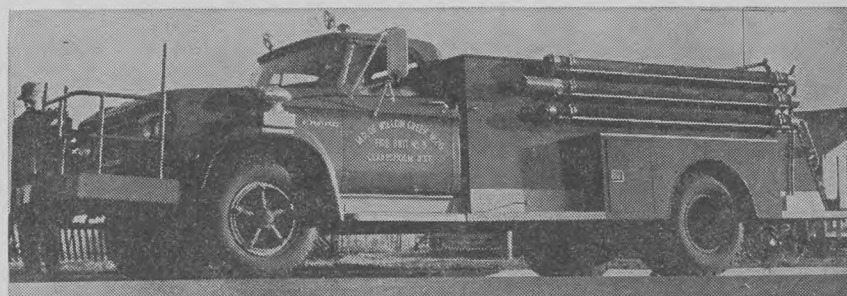
To Fight Farm Fires

The purchase of five fire trucks at one time by the Municipal District of Willow Creek in southern Alberta for the purpose of fighting rural fires is believed unique in Canada and the United States.

The trucks were purchased for Nanton, Stavely, Claresholm, Granum and Fort Macleod. The machines are stored and manned by the towns to serve the surrounding districts.

The trucks were equipped by the Saskatoon Fire Engine Co. Limited, Calgary. When an official of the company delivered the truck to Claresholm, he pointed out the rare nature of the purchase.

The tank on each fire truck contains 700 gallons of water. — M.M.G., Claresholm, Alta.



[Paul Anderson photo]

Puts Waste to Good Use

AN ANIMAL waste digester described at a recent University of Illinois farm mechanization workshop not only gets rid of manure, it produces methane gas for heating or to power combustion engines.

Paul Taiganides, Iowa State University engineer, said several of the digestion plants are in operation in Europe and there is one in San Diego County, Calif. Europeans use

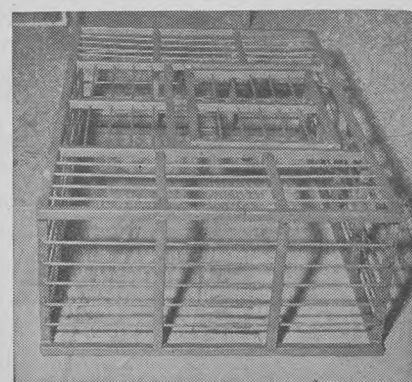
the gas for heating buildings, crop drying, refrigeration, production of electricity and power for tractors.

Limitations are that the digester requires daily attention; there is an explosion hazard if air mixes with the methane; and the digester equipment to take care of waste from 100 dairy cows and 1,000 hogs costs \$9,000-\$15,000. On the other hand, the digester offers odor reduction, fewer flies and rodents, less chance of water pollution and marketable end products of methane and sludge.

Chicken Coop and Carrier



Here is an all-steel chicken coop and an all-steel coop carrier designed to carry 196 coops fully loaded. The coop is made of angular and tubular steel with a solid wooden bottom and has no moisture absorbing qualities. It will not rust or corrode. The carrier weighs only 2,800 lb. and can be installed directly on the framework of any single-axle truck. Carriers for larger vehicles can be obtained by custom ordering. It is manufactured by Smithville Metal Products Ltd., Smithville, Ont.



THE SKIRMISHES OF MILLICENT AND EDGAR



Edgar shoved desperately but Milly countered his every thrust

Illustrated by
JIM WALKER

by JOHN McMANN

EDGAR BARNES CAME DOWN from Edmonton to be our new clerk of the court when old McMurchie died. We had all expected, I suppose, another short fussy little man, but instead Edgar Barnes turned out to a fine big fellow in his mid-forties with a good crop of gray hair and blue eyes that looked pleased about everything.

I first met Edgar when he came into my real estate office one Saturday morning. He introduced himself, and then reached across the counter and shook my hand like he was trying to squeeze all the juice out of it.

"I'm a bachelor," he told me, puffing away at a crusted old pipe which certainly no wife would ever put up with, "and I'd like you to find me a little house somewhere, something that's big enough to move around in but small enough so I can do my own housekeeping."

I took him over to Ambrose Street, because I figured that little storey-and-a-half next to Millicent Purdy's house would be about right for him. Sure enough he took to it right away, and wrote me out a cheque for the deposit. We stood out in front admiring the place.

"Who lives next door?" he wanted to know, nodding toward Miss Milly's house.

"That's the old Purdy place," I told him. "Miss Purdy still lives there, quite an attractive woman . . ."

He didn't let me finish.

"The house is awfully close to mine, isn't it?"

"Well, this is the older part of town," I explained, "and these lots are only thirty-three feet wide."

Suddenly he left my side and went down to the corner to search in the tall grass for the surveyor's peg. Then he came striding back with those great long steps that people take when

they're pacing off distances. He ended up at Miss Milly's pansy bed.

"Seems to me some of that flower bed is on my lot," he said. He got down on his haunches and squinted over it. I got down and squinted, too.

Just then Miss Milly came out onto her porch.

"You're the shortest pair of men I've seen for some time," she remarked.

We stood up, and she added, "That pansy bed is exactly four inches inside my property line."

"Good morning, Miss Purdy," I said cheerily. "Miss Purdy, I'd like to have you meet Mr. Barnes. He's your new neighbor."

She gave him her "company" smile, and he took his hat off and went over and stood by her porch rail looking up at that fine red hair of hers and those big gray eyes. He remarked that he would be working at the court house starting Monday — but his eyes kept wandering back to Miss Milly's pansy bed. And she said that that was nice and observed that the court house was right across the street from the public library where she worked — and her eyes kept following his, back to the pansy bed.

I said I'd have to be going.

Edgar said, "Well, before you go maybe we could pound a stake in four inches on the other side of that pansy bed," and he rushed around here and there looking for something that would do. In a moment he was back with an old wooden runner from a child's sled and a big stone to use as a maul. He began pounding the point of the runner into the sod.

"What in the world do you want to do that for?" Miss Milly asked him.

"Oh, well, a man likes to know where his property line is," Edgar explained with a warm smile.

Milly was not smiling.

"How are we going to cut grass with that thing in the way?"

"Oh, it's just a matter of getting up as close as we can with the mowers and then finishing it off with our clippers," Edgar explained.

Milly said not a word, but suddenly turned around and disappeared into her house, shutting the door a bit firmly.

And that's how it started.

ABOUT A WEEK LATER I went over to Joe the barber's to see if he could confirm a rumor I had heard about the A.G.T. rebuilding the telephone office on Brunton Street. For the first time in my recollection he couldn't add a thing to what I already knew. It seemed to bother him. He pulled my hair and rattled his clippers over my skull.

"One thing I can tell you though: your man Edgar from the city and Milly are getting along pretty good. He's fixed up her back porch and she's made him some blueberry muffins."

I was astonished, remembering the way things had started off with them.

"How do you know that?" I asked Joe's reflection in the mirror.

The reflection looked offended.

"It's part of my job."

"Then they're getting along all right?"

"Well, they would be if it wasn't for his string."

"His string?"

"Yes; every time he does anything around the yard he gets out a ball of string, fastens one end of it to the peg you drove in by her pansy bed . . ."

"I did not!" (Please turn to overleaf)

"... And runs it to the back of his lot. Then he cuts grass or rakes leaves or whatever he's doing, right up to that string and no farther. It's a small thing, I suppose, but it's beginning to get Miss Milly down a bit. One of these days she'll blow her cork."

Old Mr. Cousins was in the barber shop as usual, although he hasn't had or needed a haircut in years.

"That ain't all," he said. "The other day he offered to rake up her yard for her, but before he started do you know what he done? Stretched out that string of his again, from one end to the other! Well, sir, she says to him she says, 'Why the

string?' And he says to her he says, 'Well, if I'm going to rake up your yard I got to know where to start, don't I?'" And Mr. Cousins laughed and coughed and laughed at the humor of the situation.

Joe said, "It's too bad those houses are so close together."

"Great protection against Indians, though," said Lawyer Hawsey from behind a newspaper in the corner.

I looked at Joe and he looked at me. Lawyer Hawsey was having one of his "bad days."

"Mark my words," Joe said, "sooner or later Edgar's going to put up a fence between those two houses, and you know how Miss

Milly has always hated the idea of a fence in there."

Lawyer Hawsey said, "A fence has to be horse high, bull strong and pig tight. That's the herd law."

We ignored him.

One Saturday morning, later in the fall, Miss Milly came home from shopping to find post holes dug all the way down the property line between her place and Edgar's. She was angry. She rushed into the house and by the time she reappeared, in her curling slacks and Siwash sweater, Edgar had a post in each of the holes, not tamped but just set in.

Miss Milly seized one of the posts, pulled it from its hole and heaved it into Edgar Barnes' yard.

Edgar was thunderstruck.

"Milly! Whatever in the world are you doing?"

"Well, if you don't know," she replied grimly, "there's no good my telling you."

And she seized another post and sent it bounding after the first.

"Here now, you just cut that out!" shouted Edgar with some spirit, and he strode over to the first post, picked it up, strode back with it and rammed it into its post hole again. Milly, meanwhile, had uprooted two more and sent them tumbling into Edgar's yard. Obviously he was going to have to work faster. She was now three posts ahead of him. He ran to where the second post lay and hurried back with it. However, in that time she had torn out the first one again, and the fifth as well. And then, while he was retrieving them, she flung three more across the grass. It was a very unequal contest: he had to run after *his* posts, while *hers* were being brought to her. He gave it up and began to whine.

"Milly, how am I ever going to get these posts lined up if you keep doing that?"

"Well, you could take them in the house," she replied, heaving another one in his general direction.

"But, Milly, couldn't we talk this over?"

"Certainly. Let's talk it over. In the first place..." she pointed to Edgar's string which was, as usual, stretched the full length of the property line, "... you've got all your post holes on my side of the string. In the second place, you've never bothered asking me what kind of a fence I might like to have, or even if I wanted one at all. So let's talk that over a while."

Edgar couldn't think of a thing to say.

"I don't like fences around the yard," she went on, a little more quietly. "With these narrow lots it's like living in a grape basket."

"But Milly, I only wanted to make it easier to find the property line."

"Oh, you and your everlasting property line..."

She choked up and couldn't go on. Her lower lip began to tremble and her big gray eyes went all blue and dewy.

Edgar suddenly found himself across the string with his arms around Miss Milly, trying to comfort her.

"Gosh, Milly, I just didn't think..."

"Oh, that's all right, Edgar. If you want a fence between us, that's perfectly all right. Only I think I should have some say as to what sort of a fence it's to be."

"Sure, Milly, sure. Any kind you say."

"All right, then..." she was trying bravely to hold back the tears, "... you just fill all those post holes in and put some new ones on your own side of the string..." she sniffed quite noisily, "... and you can have your old fence. But no more than a foot and a half high. Now is that all right?"

"Oh, fine, Milly, just fine."

She smiled up at him. It was like the sun coming out after a storm. Edgar went back to his fence building, starry-eyed, marveling at this woman's generosity.

AS THE COLD WEATHER set in that year Edgar and Milly were seen more and more in each other's company — church, little social gatherings, bowling, curling — and, of course, we all figured we knew how it would turn out. However, the matchmakers got a really serious setback during the January thaw.

There had been a lot of snow that year and most of it was still lying around. Then the cold spell broke and the sun came out, and one day at noon as Miss Milly was coming up her back walk all the snow on Edgar's roof on the slope next to her suddenly cut loose. It was a small avalanche. It roared a little, cleared the new fence easily, and filled up Miss Milly's sidewalk to a depth of about two feet.

Edgar appeared at his back door. He was in shirt sleeves and he was munching on something.

"Oh, hello, Milly. Just getting home for lunch?"

She didn't reply.

"Say, did you hear some funny kind of noise just now?" he went on.

"Yes, I did, and you'd better get your shovel and get out here and get your snow off my sidewalk."

She pointed to the mess at the side of her house.

Edgar came out to look things over.

"Well, now, I don't know how you can say it's my snow. It's on your side of the property line."

He kept on chewing methodically.

Milly was furious.

"It just this instant slid off your roof. I tell you, I saw it."

"Oh, well, now, it's just ordinary snowfall, you know."

"Snowfall?" she shouted. "Are you trying to tell me it's snowing with the sun blazing down like that?"

"Well, no. This is part of the last snowfall. It hit my roof, lodged there for a time and then continued on down here. You see, it hadn't quit falling."

He peered across the fence and added:

"It has now, though."

Milly studied the whole situation.

"Well, not quite," she said, and seizing a shovel from the corner of her house she commenced to heave the snow over the fence onto Edgar's sidewalk.

(Please turn to page 43)

The Real Secret of SUCCESSFUL MARRIAGE

Advice on how to be happily married was never so freely available as it is today.

Marriage problems are openly discussed in newspaper columns and on the radio. Marriage advice is available from the man next door, who speaks from experience...and from the psychologist, whose views come from study and research. There is no topic...from etiquette to fidelity...on which advice and counsel are not available.

Yet with all this marriage education, the modern divorce rate continues at an appalling high!

This condition obviously is not due to ignorance of the so-called "facts of life." It cannot be attributed to economic problems, for good times have been repeatedly marked by a high divorce rate. Nor can it be blamed on the excuse of personal "incompatibility," which so often appears in divorce petitions.

These and other practical problems undoubtedly contribute to marriage conflicts. But the basic, fundamental cause of marriage failures goes deeper. It is the failure of many people to realize the true meaning of marriage...to recognize that it is a life-long union of a man and a woman...to see that its main purpose is the begetting and rearing of children.

In Catholic eyes, marriage is, first of all, a contract which...as with all con-

tracts...must be governed by justice. A purely sentimental and physical attraction between a man and a woman, which is not permeated by a sense of duty to each other and to God, is not the love upon which enduring homes are built.

But the Catholic Church teaches that marriage must be what God meant it to be...and He made it not only a contract—but a Sacrament.

When the marriage of a man and a woman is a Sacrament, they receive title to all the divine helps necessary to overcome the disappointments and difficulties of domestic life. They are thus better able to overcome personality differences...better able to deal justly with each other...better able to understand the many practical problems of living together.

Marriage is not a strictly private affair. It is the concern of the whole community. It is the special concern of the Church, which is charged with safeguarding this Sacrament. That is why the Catholic Church strives to impress the true nature of marriage upon all who hear her voice.

Whether you are already married...or just thinking about it...you will be helped by a pamphlet we will send you explaining the true nature of marriage and the blessings that come from a proper understanding of the married state. Write today for your free copy. Nobody will call on you. Ask for Pamphlet No. CY-19.

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Here, in the fertile earth of the great Canadian West, grows the world's finest wheat. This is the wheat that Five Roses mills into flour which is unsurpassed anywhere for its baking qualities. It is so perfect that Five Roses prints an unconditional guarantee of its quality on every bag. This guarantee assures you that every-

thing you bake will turn out perfectly, or your purchase price will be refunded. It's a guarantee worth remembering when you consider all the time, effort and money you put into homebaking. If your present baking isn't always what you'd like it to be, then try Five Roses Flour. It's *guaranteed* to please you — every time.



Treasured Five Roses Favourite

Five Roses has a special way of making everything you bake look and taste better — like this tangy, golden Orange Nut Loaf. Serve it with a cool summer salad.

ORANGE NUT LOAF

1¾ cups Five Roses	¼ cup butter	2 teaspoons orange rind
Pre-sifted Flour	¾ cup sugar	¼ cup chopped nutmeats
1½ teaspoons baking powder	2 eggs	½ cup milk
1 teaspoon salt	<i>Glaze:</i> 2 tsps. orange juice 1 tbsp. sugar	

Stir Five Roses Flour, baking powder and salt together. Cream

butter; add sugar gradually, beating between additions. Beat in eggs, one at a time; add orange rind. Add dry ingredients alternately with milk, mixing well after each addition. Pour into a greased loaf pan 8½ x 4½ x 2½ inches. Bake in a moderate oven (350°F.) 50-60 minutes. Cool ten minutes; mix orange juice and sugar together for glaze and spread on loaf with pastry brush. Return loaf to oven for 1 minute. Let cool completely before slicing. *Note:* If desired, the nutmeats may be increased to ¾ cup.

FIVE ROSES FLOUR
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Make this year something special in the jam-and-jelly department. Put up some new varieties—cherries and peaches as well as berries—and remember to put up lots (after all, nothing tastes better than the jam you make yourself). Remember to add the Certo too. By adding Certo fruit pectin, you get up to 50% more jam or jelly. And Certo locks all the goodness in with its flavour-saving 1 minute boil.



BANANA AND STRAWBERRY JAM

- 4 cups prepared fruit
(3 ripe bananas and about 1½ qts. ripe strawberries)
- 5 cups (2¼ lbs.) sugar
- 1 box Certo Crystals

Mash 3 ripe bananas to a fine pulp. Crush completely, one layer at a time, about 1½ qts. fully ripe strawberries. Combine fruits and measure 4 cups into a very large saucepan.

Measure sugar and set aside. Add Certo Crystals to fruit in saucepan; mix well. Place over high heat; stir until mixture comes to a hard boil. At once stir in sugar. Bring to a *full rolling boil* and *boil hard 1 minute*, stirring constantly. Remove from heat and skim off foam with metal spoon. Stir and skim by turns for 5 minutes to cool slightly, to prevent floating fruit. Ladle into glasses. Cover jam with ⅛ inch hot paraffin. Makes about 9 medium glasses.

Tested recipes and directions from General Foods Kitchens come with both Liquid and Crystals

Fruit-ful Advice

LONG DAYS OF SUMMER sunshine are coloring both native fruits and garden varieties. Whatever your method — whether long boil, short boil, or no cooking at all — it's time to think of capturing these jewel-like colors and fresh fruit flavors in jams and jellies for winter use.

At the same time as we're hoarding away some of summer's abundance to embellish the meals of a later season, our natural curiosity demands that we save a little from the preserving batch to sample right away. And often we find we have too little left to fill the last glass or jar anyway. Sometimes we use this sampling bit on breakfast toast, but we have found an assortment of other popular uses for it, too. And these suggestions are good all year round!

- The ladies are staying for tea? A pretty open-face sandwich can be made simply by cutting the crusts off several slices of white bread, then cutting the bread into 1" strips. Butter lightly, then spread each strip with clear fruit jelly and sprinkle grated coconut on top.

- Leftover plain cake which has become dry can win new laurels! Just cut it in thick slices, toast them, then spread with jam and whipped cream. Serve with pride, and prepare enough for seconds.

- Vary baked custard by placing a spoonful of preserves in the bottom of each individual baking cup. Pour custard mixture over top and oven-poach by placing the baking cups in a pan of hot water in a moderately warm oven at 325°F.

- Everyone enjoys individual attention! You'll make a hit with individual upside-down cakes made with jam or leftover fruit. Line muffin cups with cupcake papers, place 2 tablespoons of jam or fruit in the bottom and cover with cake or muffin batter. Bake as usual and invert as soon as possible after removing from the oven.

- You can combine the tasty qualities of two old favorites — jam tarts and baking powder biscuits — in one delicious quick hot bread. Make one-quarter recipe of your favorite baking powder biscuit dough. Roll the dough to ¼" thickness. Cut half the dough in circles with a biscuit cutter and cut the other half with a doughnut cutter, removing the center. Place 1 teaspoon of jam or jelly on the whole circles. Press the remaining circles (with center removed) over them, using the tines of a fork to seal edges. Bake the filled biscuits on a greased cookie sheet in a hot oven preheated to 400°F. for about 15 minutes, or until done.

For a sweet quickbread you can make in a jiffy, roll baking powder biscuit dough into a rectangular shape ¼" thick. Brush the dough with butter and spread with jam or preserves. Roll the dough as you would for a jelly roll, starting from a long side. Cut in ½" thick slices and place slices cut side down in muffin cups or on a greased cookie sheet. Bake in a moderately hot oven at 375°F. for about 20 minutes.

(Continued from page 40)

Edgar ran for his shovel, and started heaving it back.

A few minutes later, up to his knees in snow and pretty well covered with the stuff, he stopped for breath.

"This isn't good for my heart, you know," he remarked.

"Well, you can always quit," said Milly, without even pausing.

"I've always had a weak heart."

Milly snorted and said something like:

"And head to match."

Edgar said: "They almost lost me as a baby, you know."

"They should have tried harder," said Milly, calmly, keeping right on with the shoveling.

Then Edgar lost his temper and started shoveling snow as though life itself depended on it, with Milly countering every thrust.

Old Mr. Cousins, out for his morning walk, stopped to watch the battle between the houses. He said later it reminded him of the big blizzard of 1908, the year he came west.

Presently, Miss Milly had had enough. She was weary and wet and furious, and she threw down her shovel and stomped up the stairs into her house, slamming the door behind her.

While Edgar was glad it was over, he didn't particularly enjoy the victory. He stood there for several minutes leaning on his shovel and catching his breath. Then he cleaned up his own walk, crossed over to Miss Milly's and cleaned that up, too. It took quite some time, but if Miss Milly observed that he had capitulated she gave no sign. From then on, for the many weeks that followed, she avoided him as much as possible, and on the rare occasions when they did meet she did not speak.

Edgar was miserable, though he certainly would not admit it. So was Miss Milly. And she wouldn't either.

ALONG ABOUT THE FIRST week in April that year the last of the winter's snow melted away and things began to dry up. One bright morning, full of sunshine and bird twittering, Edgar got out an old broom and started sweeping up the sand from the town sidewalk in front of his house. He did one square at a time, sweeping the stuff into a neat little pile and then moving on to the next. He was, of course, not aware that from behind her living-room curtain Milly was keeping a very critical eye upon him. He was thinking of her, though, wishing that things were back on the old friendly basis, and then scowling when he considered how unreasonable she was. It was in that mood that he came to the last square of concrete in front of his place, and instead of sweeping that sand into a pile like the rest, he gave it a few pettish slaps with the broom, shoving it ahead onto the walk in front of Miss Milly's house. He was totally unprepared for what happened next.

Her front door burst open, and out came Milly, red hair tied up in a kerchief and push broom in hand. She stopped in front of Edgar and wagged a finger under his nose.

"How dare you sweep that stuff onto my part of the walk!"

Edgar was pleased to have her speaking to him again but would have preferred a different tone of voice.

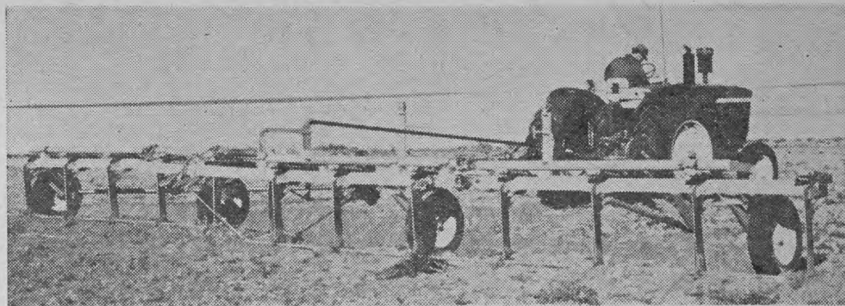
"Well, now, Milly, I don't know; I guess I just . . ."

"Don't you dare make excuses. You're just trying to take advantage of me, that's all. Well, you're not going to get away with it!" And with that she started shoving the sand back onto Edgar's freshly swept walk. The dust began rising and Edgar just stood in the middle of it not really wanting to get involved in one of these things again.

Presently, however, he became painfully aware that Miss Milly was getting in a few licks with the push-broom that had nothing to do with sweeping. She swept sand, then caught him across the shins a couple of times, and then swept sand again.

"Now, see here, Milly," he protested, but instead of stopping or

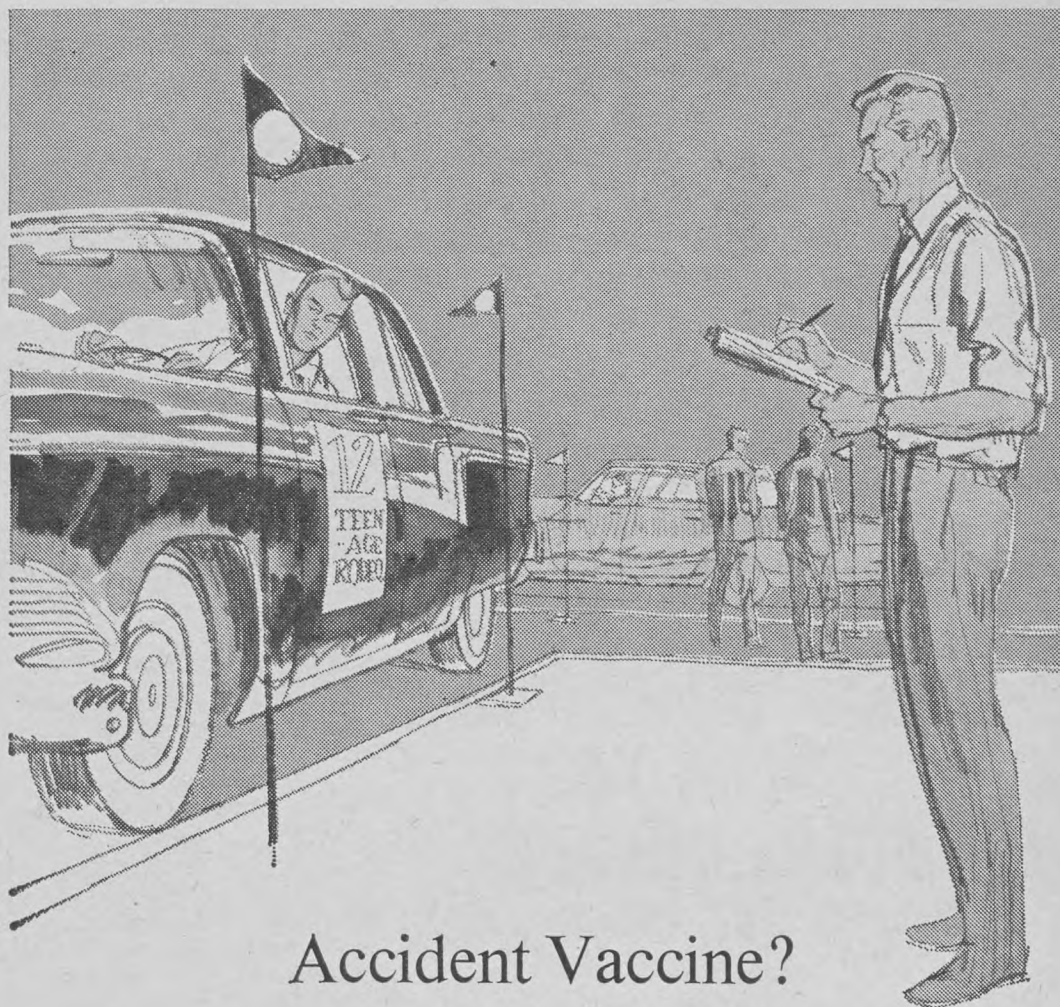
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even listening, she clipped him a good one on the left ankle and went right on with the dust-raising.

That was the one that did it. Edgar planted both feet, swung his broom, and whomped her solidly in a suitable place which nature had very generously provided. She let a startled yip out of her, dropped her push broom and ran for her house—the general direction in which she was headed anyway.

Edgar stood there as if stunned, because immediately the enormity of what he had done hit him like a hammer. He had whomped dear Milly! Oh, true enough, she was a very aggravating woman, but . . . He walked into his yard and into his house dragging his broom behind him. This was the end, he felt. She would certainly have nothing more to do with him.

He didn't believe he had hurt her,

mind you. After all, he had only hit her with broom straw, and recalling the point of impact he felt certain there couldn't be any damage at all. He was, therefore, horrified to see Dr. McSween drive up to Milly's house a short time later. He went in and stayed there, it must have been as much as three-quarters of an hour. Then he came out, looked balefully in the direction of Edgar's house, shook his head, and drove away.

Edgar was desolate. He must have hurt her after all. He took a couple of two-twenty-tuos and lay down on his bed, trying to think of some way out of this misery. There was none.

We talked the thing over at the barber shop.

Joe's sympathies were clearly with Edgar.

"After all," he said, "there comes a time with both women and children when you can't reason with them. That's why Providence, in Its wisdom, made men bigger."

We nodded wisely, and Metro Wozney recalled that only last month he had had to throw a couple of women out of the hotel.

Paul Coutts, the social worker from the Department of Public Welfare, took an opposite view.

"If you saw as many drunken husbands and wifebeaters as I do you'd feel the whole works should be put in jail."

I felt obliged to point out that Edgar was neither a drunken husband nor a wifebeater. Mr. Coutts only sniffed.

Lawyer Hawsey was over his "bad time" and as he submitted to one of Joe's haircuts he gave us a rundown on the law in relation to assault and provocation. It seemed that the case of Taylor and The King was the one he favored most, in the Supreme Court of Canada. The test was whether the provocation was sufficient to deprive a reasonable man of his self-control.

At this point Magistrate Dawes got up and left without getting his hair cut, because he figured he would be taking the trial and he didn't want to be influenced by anything he heard at Joe's.

Then Joe took over again to say that likely it would all depend how badly Miss Milly was hurt. "Apparently she's pretty bad, but she won't see anybody except the Doc and he won't say anything on account of his hypocritical oath."

Things got a lot worse before they got any better.

The first of the week The Advance-Herald came out with an editorial on "Rowdyism in High Places," suggesting the Government should be a little more choosy whom they let into the Civil Service. Edgar went to work all right but he was moping, distracted, expecting at any moment some communication from the Attorney General suspending him from his job. On Tuesday, in response to several enquiries, Corporal Hames let it be known that he was prepared to make the arrest as soon as Miss Milly swore out the Information and Complaint.

Then early Wednesday morning, about half past four, an idea occurred to Edgar which made him

sit bolt upright in his bed. He wondered why he hadn't thought of it before. He would put an end to all this talk of arrests and trials and suspensions and rowdyism—and all this squabbling over the property line as well. He would ask Milly to marry him! Then there wouldn't be any more property line between them, and he'd have Milly right with him for the rest of his days—a thing he'd been wanting for some time now anyway, only he hadn't quite realized it before.

It didn't occur to him that she might turn him down.

So about half past nine, with the sun shining again and the birds twittering again, he arrived at Miss Milly's front door. He looked haggard but a good deal brighter than he had for some days. In one hand he had a large bouquet of spring flowers he had just got from Mrs. Valencourt's Flower Shoppe, and with the other he was about to knock on the door when Dr. McSween opened it from the inside.

"Are you going to hit her with those this time?" the Doctor asked him, looking at the flowers.

Edgar gave him a look that would have withered a stone.

"Well, go on in," said the Doc. "She's been watching you come up the walk."

Milly got up painfully when Edgar came in. He could hardly believe what he saw. She had a great big black eye, her forehead was all bandaged up and her right cheek was badly bruised and swollen. Her right arm was in a sling. Edgar was appalled. Now he understood why folks were treating him like a monster. He was a monster to have done this to Milly. He really didn't think there was much point going on with the proposal speech he'd been going over since early morning. Still . . .

"Milly, I had no idea you were hurt this bad, and I'm so very, very sorry." He thrust the flowers at her. "Milly, I've been thinking; let's get married. Then we'll both be on the same side of the property line. I'm so fond of you and I can't stand being away from you like this!"

"When?" asked Miss Milly.

Edgar hadn't gone far enough in his considerations to have even thought of a date.

"Next month?" he suggested.

"Next week," said Milly, and standing on tiptoe, threw her good arm around him and kissed him soundly.

Edgar dropped his flowers. There was a sort of fuzzy feeling back of his eyeballs and he thought he could hear Doc McSween chuckling in the hall. Then his senses began to catch up. He looked down at the black eye, the bandaged forehead with the red hair sticking out the top and the swollen cheek.

"But Milly, you're hurt so bad. Don't you hold that against me, even a little bit?"

"I can't, Edgar," she said into his lapel. "You see, when you walloped me last week, I ran into the house to get a bigger broom and I fell down the cellar stairs."

And that's the way it ended. More or less. At least, according to Joe the barber.



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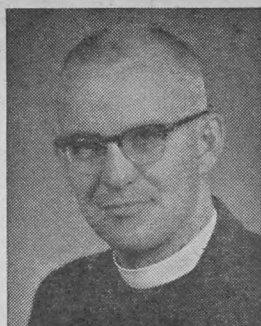
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Let's Think It Over

by THE VERY REV. M. L. GOODMAN



Liabilities

There was an old couple in our township who'd been married for 40 years. They had started off hopefully I suppose, but during the 40 years something had gone wrong. This is a typical incident in their married life. The old lady would wash and polish the kitchen floor until it was immaculate and shining. As soon as the old "gentleman" noticed that she had done this, he would go into the barnyard to the manure pile and load up his boots. Then he'd walk all over her clean floor.

We smile, but this is a tragedy. This is all that is left of a once happy marriage. In the beginning the young man had been stubborn and bad-tempered and the young woman had been over fussy about her house-keeping. If they could have been brought to see what dangers lay in these faults, their marriage would have been quite different.

It doesn't matter if you have a million dollars, or a thousand-acre farm, *the only real contribution you make to the partnership of marriage is yourself.* You need to know what that self is like. You need to assess the dangerous liabilities which lie hidden there.

Suggested Scripture: St. Matthew XXVI, verses 31-35 and 69-end.

Yardstick

In my tackle box there is a thing called a "De-Liar." It's intended to help rehabilitate the reputation of fishermen. The "De-Liar" is simply a spring scale with an attached coiled steel rule.

We need a "De-Liar" to measure our religious habits so that we may get an honest idea of where we really stand. As the old fellow says: "If you're going to get anywhere, you have to know where you're at!" May I suggest the following — using churchgoing as our test?

Where on this scale would you place yourself as regards your reasons for going to church the last time you were there?

Elementary Level

1. **By accident.** For example, you came with your girl friend. Being in church was not your primary motive!
2. **Testing.** You had decided you should give religion "a whirl" and see if you got anything out of it.
3. **From crisis.** A bereavement, a personal disillusionment or failure. You were looking for help.

Secondary Level

1. **Pleasure.** You enjoy being part of the worship. You appreciate the fellowship. You like singing hymns. You occasionally get something out of the sermon!
2. **Habit.** Churchgoing has always been part of your life.
3. **Duty.** You recognize churchgoing as part of the pattern of respectable and responsible living.

All the above categories are *vulnerable*, especially those of the elementary level (see paragraph 3). From any of them you can, more or less easily, become an "ex-churchgoer." There are lots of them.

The *invulnerable position* is yours when you are able to say that you go to church to worship God, because you have committed your life to Him in Jesus Christ Our Lord.

Suggested Scripture: St. Luke IX, verses 57-end.

Vulnerable?

One of the sad experiences that comes to the parson is his discovery of people who once went to church but now don't bother. They may even have been fairly "active" having undertaken certain jobs and responsibilities; still it seems that their churchgoing was based on a shaky foundation. The motive behind it was faulty and thus they were vulnerable. Accident, testing, crisis — even pleasure, habit or duty — can get us to church, but they can't be counted on to keep us there. Only devotion to God can do that. Lacking this basic motivation, we are exposed to these three dangers:

1. **The distraction of some new interest.** We didn't get much "out of" church so we gave more and more of our time to something else which offered more immediate satisfaction.
2. **Disillusionment.** We didn't like the way "they" did things. We disagreed about the new church hall. We objected to the financial campaign. We found out that the minister was human.
3. **Disappointment.** Although we mightn't put it into words, it's as if God hasn't played fair. We tried, didn't we? Then we had more failures, more bad luck, or more adversity. This isn't the way God should treat a Christian! So we fell away.

Suggested Scripture: St. Matthew XIII, verses 1-23.

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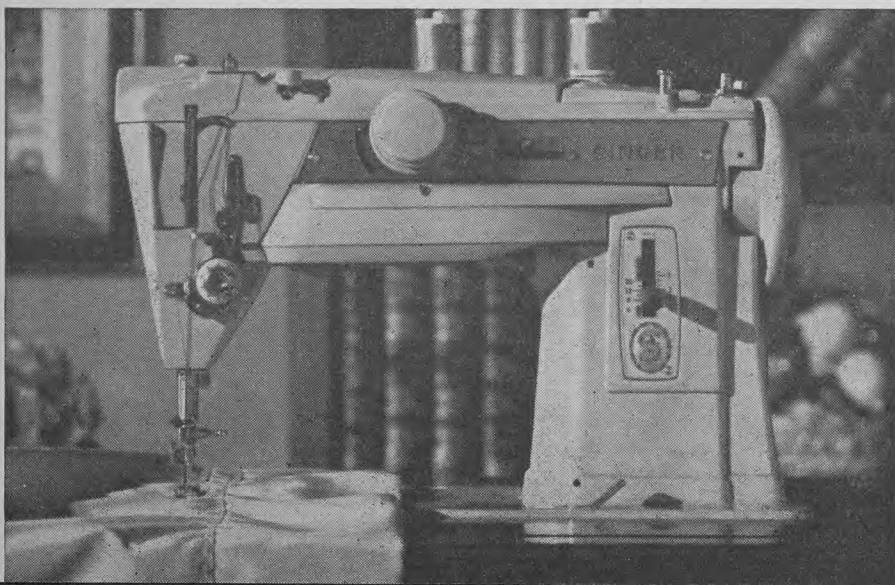
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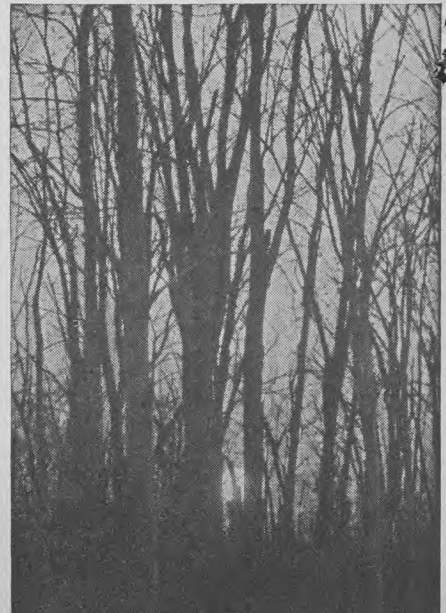
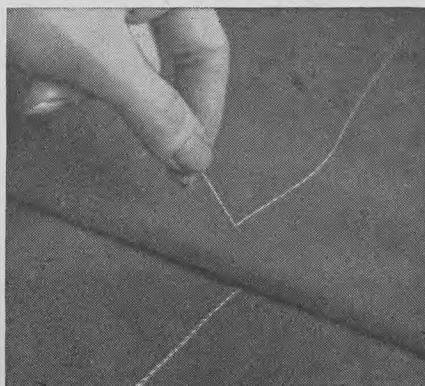
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[Guide photos

For years Clear Lake knew only the hunters and fishermen who stopped on its shores. Now it is the headquarters for the district's many boating enthusiasts

Enthusiasm and effort by people from town and country built a park for picnics and water sports



Local contractors built the white frame camp kitchen which has a cement floor and is equipped with a good stove. It's a busy place all summer

Recreation for a Community

by ELVA FLETCHER

THERE'S MORE AND MORE TALK these days about the importance of recreational facilities for farm families. Many must travel a long way if they want to launch a boat or let the youngsters try their skill with water skis. Others, such as the families in the Claresholm district of Alberta, are more fortunate. Their community had the makings of a recreation area right at home that a little development converted into Clear Lake Municipal Park.

All summer long boats carve sharp patterns on the length and breadth of the lake surface and water skiers weave in and through their wake. It's a favorite picnic place for the district's farm families, for town dwellers from nearby Claresholm and Stavely, for the community's game and fish associations, a place to fish both winter and summer. But its particular role is that of headquarters for the community boating club.

In terms of size, Clear Lake is a small body of water. Two miles long and just over a half mile wide, it nestles into the rolling countryside a few miles from the busy southbound Macleod Trail traffic stream.

Lola Lange, city-girl-turned-farm-wife, took me for my first look at the lake one mid-week afternoon. It was quiet then. A soft breeze rippled the surface. Overhead a few straggly clouds studded the summer sky. The silver dock, bare of boats, lay idle; so did the white frame camp kitchen above it.

"It's quiet out here on week days," Lola explained, "but there's lots of activity going on on summer evenings and over the week ends. Why, often there are as many as 20 boats either on the water or tied up at the dock. It's a good place for summer-time recreation for our young people. And while now we use it mostly for boating and water skiing, we'll use it for swimming too if we can beat the weed problem.

"The lake has been here as long as anyone around here can remember," Lola told me, "but nothing was ever done about it until the forties

when Ducks Unlimited did some survey work. The district had suffered through the dry thirties before that and they thought it might be feasible to connect the lake to the Little Bow River system. They were thinking of duck production, of course, but about that time it got very wet here and we had ducks unlimited without any system."

PRAIRIEVILLE FARM FORUM came into the picture at this point. In 1952, its members decided to make a start on developing the lake for community use as a forum project. They built a small slab shelter on the road allowance, tidied up the area immediately adjacent to it and kept the grounds clean and tidy.

Then, in 1960, the forum group learned that some money was available from the Rural Municipality of Willow Creek for the development of a community recreation area. They acted at once. They put their ideas for the development of the Clear Lake site into a petition which they presented to the municipality. The project, they pointed out, would be supported by the boating club and the Prairieville forum. The municipality gave the grant; and the district Farm Service Board was given the job of administering it.

The first step was to get some lakeside acreage. It was no problem to persuade Rance Ralph of nearby Stavely to make 4 acres available on the western shore of the lake. This accomplished, individual members of Claresholm and Stavely Fish and Game Associations, the Prairieville Farm Forum, families from nearby farms and from Claresholm and Stavely contributed time, effort and material too. The municipality contributed the use of its heavy equipment and their shopmen helped with the welding.

For example, the fish and game associations fenced off the park property. Richard Volstad, whose farm adjoins it, worked the land for the shelterbelt. Others helped with the installation of a concrete ramp for trailering the boats. Next came the dock. When the aluminium dock that would have served their needs proved to be too

costly, they engineered one for themselves using an iron framework with a removable deck and adjustable legs. With the latter it is possible to compensate for variations in the lake level. Such people as Claresholm garageman Tom Henson, and boat club secretary Russ Lawrence, put hours of work into the dock. One afternoon a work party laid irrigation pipe. The young people helped too.

More recent improvements were the shelterbelt put in by the Claresholm and Stavely Fish and Game Associations; the pump house that makes it possible to water the young trees. Swings for the children were contributed by the community.

As Lola Lange explains it "everyone helped." Still, the initial enthusiasm and drive for the project started with the community's farm families, among them the Bill Roemmeles, the Volstads, the Langes, the Art Nelsons. Even yet Art Nelson acts as unofficial caretaker of the park property.

And now that summer-time activities are underway, 4-acre Clear Lake Municipal Park does serve to confirm the wisdom of converting a natural resource into an asset that the entire community may share.

Home and Family

Warm in Winter — Cool in Summer

That's what two satisfied farm families say of their Electric Home Heating

by **GWEN LESLIE**

Home Editor



[Guide photos

The Pallisters built a chimney for the woodstove they kept to warm the basement on laundry day. Bell at back gate is pride of Lenn's collection



Baseboard units such as this one in the living room distribute warmth along the floor and wall edges, spreading an even-flowing blanket of heat



This thermostat controls the under-window kitchen baseboard heating unit. Some, like that in the bathroom, are controlled on the unit itself

ALTHOUGH IT'S A relative newcomer to the home heating field, electricity is wooing and winning a growing number of home-building families. You can tell an electrically heated house by its roofline; unless it has a fireplace, it needs no chimney.

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- There are no drafts or hot spots.
- Humidity control provides a comfortable climate. Electric heat is less dry than conventional types. Fans in kitchen and bathroom exhaust extra moisture. These may be operated by a manual switch or they may be made automatic by the attachment of a humidistat control.
- There are no hidden costs, such as the electrically powered blowers on conventional systems.
- Electric heat is efficient — the kilowatt hour bought is burned.
- In some areas, preferred insurance rates are available to electrically heated homes.
- Electric heating makes adding a room especially easy. The heating for each room is a separate unit which operates independently of the others.
- Individual thermostatic controls allow you a variety of temperatures. The temperature in activity rooms can be set lower than in sitting areas, if you desire.

There is another advantage. Electrically heated homes are cooler in summer, and quiet too. These are bonus benefits of the heavier than usual insulation required for efficient electric heating. In the walls, 3" to 3½" mineral wool or equivalent plus a vapor barrier is needed; 2" in floors over unheated areas; and in the ceiling, 8" mineral wool or equivalent plus vapor barrier for electric ceiling cable heating, or 6" if baseboard units are to be used. Because of this insulation requirement, it's rarely practical to convert an existing house to electric heat. But in considering building costs, the extra insulation is offset to some degree by the saving on the chimney.

How do these selling points prove out for the homeowner? To find out, the Guide visited two Ontario farm families who installed two of the four types of electric heating.

THE LENN PALLISTERS, R.R. 7, Woodstock, chose electric baseboard heating for the new farm home they built in 1961.

"Electric heat was new and we thought it would be the coming thing," Mrs. Pallister told me. "We had an oil burner in the old house, and we had to have the burner checked over periodically. That's something we don't have to have done with these baseboard units. We figured we'd have to replace an oil burner in 15 to 20 years, but all these electric units wouldn't go at once."

Mrs. Pallister pointed out one advantage of the individual room heat control; if someone is sick, you can set the heat for their room higher without overheating everyone else.

Even on a windy day, she noted, the house is free from drafts. It is tightly built and this pays added dividends in summer. If she keeps the doors and windows closed, Mrs. Pallister finds the house stays comfortably cool no matter how hot the day.

The Pallisters built to the standards of Ontario's Electric Heating Association, which pro-

vided them with a guaranteed heating cost estimate for the first 2 years of operation. Had their cost exceeded this estimate, the Association would have refunded the excess. Heating costs are never again expected to be as high as they are the first year, because extra heat is used during this period to dry the building itself. The Electric Heating Association estimate for the Pallisters' 26' by 46' brick bungalow the first year was \$217 to \$225. From January to December 1962, their bills totaled \$224. For January through December of 1963, another cold winter, their heating cost was \$180.90.

As far as Mrs. Pallister is concerned, electric heat is as clean as any heat could be. She and her husband and son feel they made a happy choice.

THE VERN KAUFMANS, R.R. 6, Woodstock, chose electric ceiling cable heating for their new ranch-style bungalow. They moved in January 1, 1963.

"I didn't even miss the hot air registers," Mrs. Kaufman said, "although it did seem quiet when we first moved in." They used plaster, of the non-insulating type needed by the heating cable, for the ceilings of their house. They could have used wallboard instead.

In contrast with the baseboard units beneath the Pallisters' windows, all you can see of the Kaufmans' heating system is the thermostatic control on the wall of each room. The heating cable, sandwiched in the ceiling, radiates an even warmth.

Mrs. Kaufman experimented with different temperature settings in different rooms, but settled them at much the same temperature throughout the house. In winter, the Kaufmans keep the bedroom wing of their home slightly cooler than the living and dining area, and generally keep the door which separates these sections closed.

"We do have dust," Mrs. Kaufman told me. "I think if a family is active at all, you are bound to have some, and the more people the more dust. We have wool from the new carpeting too." When I spoke with her, she felt they were still doing too much moving and shifting around in the house to judge the cleanliness factor in electric heating.

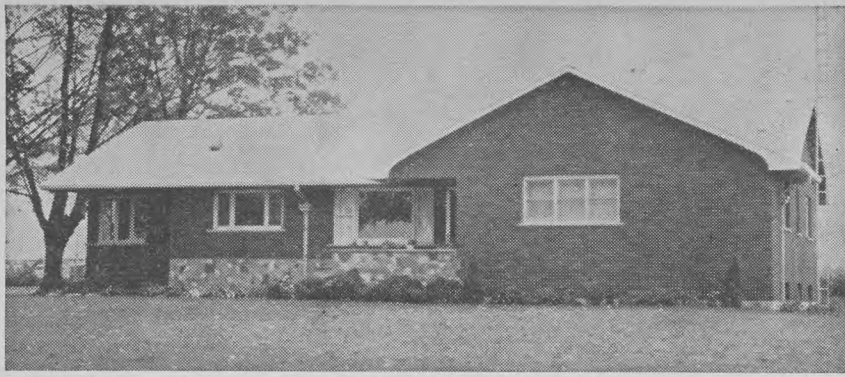
When the Kaufmans discussed building a fireplace into their home, they discovered they should allow 500 watts extra for a room with a fireplace. To some extent, the heat loss through the chimney depends on the homeowner's care in closing the damper tightly when the fireplace is not in use.

"My husband objected to a fireplace on the ground floor," Mrs. Kaufman said. "He argued that since we weren't going to have the dust from a forced air system, why would we put a fireplace there? So we put it in the basement recreation room."

Because they planned to heat their basement, the Kaufmans insulated the exterior walls to 2 feet below ground level, instead of insulating the floor over the basement.

Unless the windows are open in the bedroom, the Kaufmans find they can't hear the traffic noise from the highway just the length of the lawn away. They attribute this to the extra insulation. The only disadvantage to their ceiling cable heating that they could think of, was that there was no hot air register's blast to stand over when you came into the house on a chilly day. But they had to admit they couldn't remember having done that anyway, and if they wanted to, they could probably install an electric wall unit that would serve the same purpose!

V



The Kaufmans' bedroom faces a busy highway just the lawn length away, but they hear little of the traffic noise because of the additional insulation



Gretchen, the Kaufmans' daughter, and their grandson Brian find electric heat from ceiling cable amply warm for stocking feet and crawling on the floor



"The thermostats are all you can see of our electric heating system," Mrs. Kaufman points out. Insulated coils radiate warmth from ceiling



The Kaufmans built this massive fireplace in their basement recreation room to prevent heat loss and dust from it affecting the upstairs living area

Dandelion Summer

by DOREEN MOWERS

ALL THROUGH THIS lovely day, my little boy has been bringing me nosegays of dandelions — bouquets of love, with yellow flowers bobbing as he clutches them tightly in his fists. The intensity of their color is equalled by the brightness of his blue eyes.

"Dandy lanes, Mom!" he said as he offered his first tribute, and as we admired them together, I gently corrected him.

"Why are they called dandelions?" he pursued.

"I think because their ruffled yellow faces look rather like that lion we saw in the zoo, don't you?" I replied. Thoughtfully, he considered this answer.

Dazzled by the splendor of green lawns dotted with gold, and delighted with my pleased acceptance of his gift, Franky gathered dandelions all day long. He picked great floppy, lopsided bunches, and rolled on the lawn like a puppy. I sat with him for a few minutes, and rubbed the golden flower on his chin, in the time-honored tradition of children everywhere, to see, of course, if he liked butter!

We made dandelion curls, dandelion chains, garlands for his head and bracelets for his arms; and I remembered that for each of my three children, and long ago, for myself, too, there had been a "dandelion summer."

THERE COMES a spring, when a child is half-past two or three, when he suddenly awakens to the beauty of the world around him.

And the adult, watching the child's awareness develop, suddenly remembers how it was, long ago, when he too was young, and the world was in springtime.

It was a magic time to skim bare-foot through long grass; to peer over a wooden bridge and observe the quiet water below; to lie in meadow grass, and weave endless chains of dandelions; to lazily tell the time of day counting the gentle puffs of breath needed to blow away feathery white tufts of elderly dandelions.

I REMEMBER, too, gathering baskets of dandelion flowerlets for Grandma's dandelion wine, and watching the dark liquid bubbling in a big enamel kettle on the range. Then came the impatient wait for the wine to age enough to be nippy (but not too nippy, for Grandma was a staunch member of the Women's Christian Temperance Association. She would never countenance a beverage too strong.)

When my two girls were small, I decided to relive the past, and make some of that delicious dandelion wine which had been a ritual at Grandma's house. I sent the youngsters to gather the two quarts of dandelion heads prescribed in the recipe. It seemed to me that I had hardly measured out the three pounds of white sugar, the gallon of soft water, and prepared the juice and rind of three lemons, when they

came running back with brimming baskets.

With mounting interest the children watched as I simmered the combined ingredients on the stove for twenty minutes, added yeast, ladled the brew into a stone crock, and set it aside in a dark place for that mysterious process my old recipe called "working."

Our dandelion wine never reached the "working" stage. Two days later we succumbed to curiosity and tasted.

The word spread like wildfire among the young fry in the village. Youngsters eagerly clustered around for a sip of the exciting-looking brew.

With one eye cocked on the door for the inauspicious arrival of neighborhood mothers, I gave each child a taste.

There was a silence as each child savored my naughtily delightful drink.

Finally Susan spoke, a delighted grin on her face. "It tastes like sunshine," she announced joyously!

WE NIPPED AWAY at the "sunshine" for a day or two, and it never did get to the "moonshine" stage, which was probably just as well for my reputation in the neighborhood.

For a while I was the most popular mother in the village. It's not everyone who can manufacture sunshine.

Many adults wage an unceasing war against the lowly dandelion. You see, they have forgotten their "dandelion summer."

It's the rare grown-up who remembers how it felt to be young and wide-eyed with wonder for the big beautiful world in springtime. But memories bridge the years when your youngster lovingly presents his first bouquet of dandelions.

To everything there is a season, and a time to every purpose under Heaven . . . a time to plant and a time to pluck up that which is planted . . . a time to weep and a time to laugh . . . a time to mourn and a time to dance . . . He hath made everything beautiful in His time. V

A Requirement

*Though I may someday buy a valley farm,
You can be sure that I shall wait until
I find one where at least a part of it
Lies snuggled at the foot of some
green hill.*

*This stipulation may seem strange.
You see—
I do not want the hill for raising grain,
But when the clover blooms or wheat
turns gold
Or fields are lush with generous fall
of rain,*

*I shall be able to look down on these
Rewarding things laid out before my
eyes—
A picture worth the price of one green
hill
Of gentle slopes and not too great in
size.*

—CLARICE FOSTER BOOTH



[Guide photo]

"I thought if I found one with lots of life, he'd be OK. Andy had lots of life!" Donna Wells bought her horse as a yearling. He proved to be younger than that and wasn't even halter broken. It took professional breaking and 3 months of lessons for horse and rider before Donna could ride for pleasure

Purchasing a Pony?

"STAY AWAY from young stock," is the first rule for parents considering the purchase of a horse or pony for their children. So says veteran horseman Bob Pandrisi. Bob works as trainer and riding instructor at MarDon Stables on the farm of veterinarian Don Adams and his wife Margaret near London, Ont.

"I'd venture to say more horses are being bred right now than in horse and buggy days," Bob says. "Riding

is a sport that the whole family can enjoy, and many are taking it up. It has become an artful thing rather than just a means to an end."

Whether your purchase is a riding animal for one child or mounts for the family, there are several points you should consider. One is the age of the animal, as pointed out above. Bob recommends that anyone's first animal, horse or pony, should be at least 5 years old. If a child is to

ride it, be sure the animal is mature, well-trained, and used to having children around it.

Look for an animal with a reputation for wonderful manners, so that the child can experiment and learn. Children of 4 and 5 years of age can successfully be started to ride, but the horse must be reliable. A horse that's fine for an experienced child still may not be a good mount for a beginner.

For any other major purchase, Bob points out, you check with an expert. This help is available to people purchasing horses. Take advantage of it. Get hold of a qualified man in your area to locate a suitable mount for your needs. One of the hazards of choosing one yourself, even if you ask the right questions, is that you could get a horse that's well-broken but too high spirited. Worse yet, you might choose one that's not broken at all. You'll also want to know what kind of bridle the animal is used to.

Before you purchase, have your veterinarian check the animal.

Once the purchase is made, it's important that horse and rider get a good start. Bob Pandrisi maintains that horsemanship demands patience and skill. For the sake of horse and rider, and for the rider's continued pleasure in the sport, he strongly recommends the beginning rider take some instruction from a professional or an experienced amateur rider. Like many other professionals across Canada he donates time to the British Pony Club branch in his area.

Is there a branch of the club near you? More are starting up all the time. The club program features lectures once a week followed by instruction with the horses once a week. To locate the branch nearest you, write to Mrs. H. G. Rockwell, R.R. 1, King, Ont. She is Canadian president of the British Pony Society.

As a valuable handbook, Bob recommends the "Manual of Horsemanship of the British Horse Society and the Pony Club," published by the British Horse Society. There are other books as well. Before buying any other, he suggests borrowing a library copy to be sure the book is written in a style suitable to the child's age and reading comprehension, and geared to the child's level of understanding.

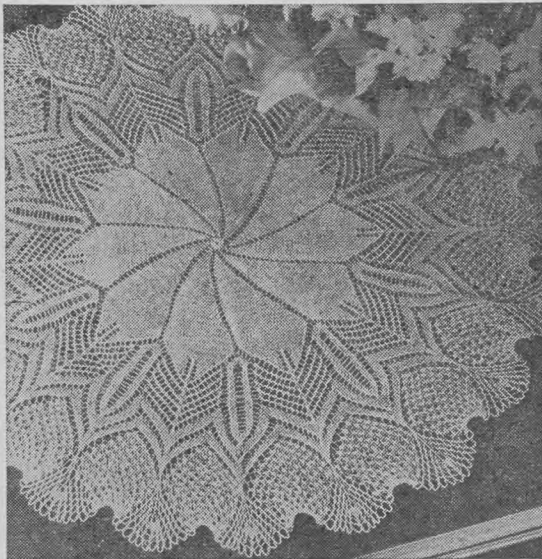
Buying the wrong horse, or even buying the right one for a child who later loses interest, can prove expensive. If your child shows an interest, Bob advises that you take the child to a professional or an experienced amateur horseman for a couple of lessons.

"Learning to handle your horse properly is hard work and takes many hours," he points out. "There's no button you can push that makes everything right. It's a long, slow process."

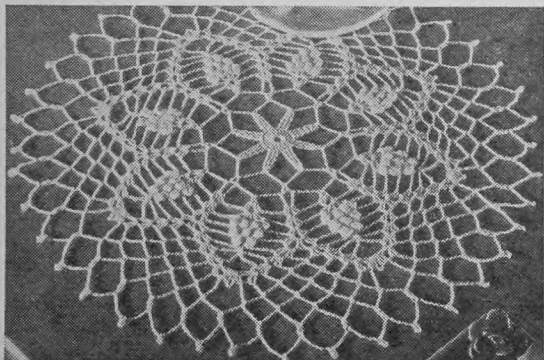
The animal, his care and maintenance, and essential equipment are costly. You stand to lose two-thirds of your investment if you buy in haste, then sell, so it is important to take your time assessing the child's lasting interest in horsemanship.—G.L.

HANDICRAFTS

A Quartet of Doilies

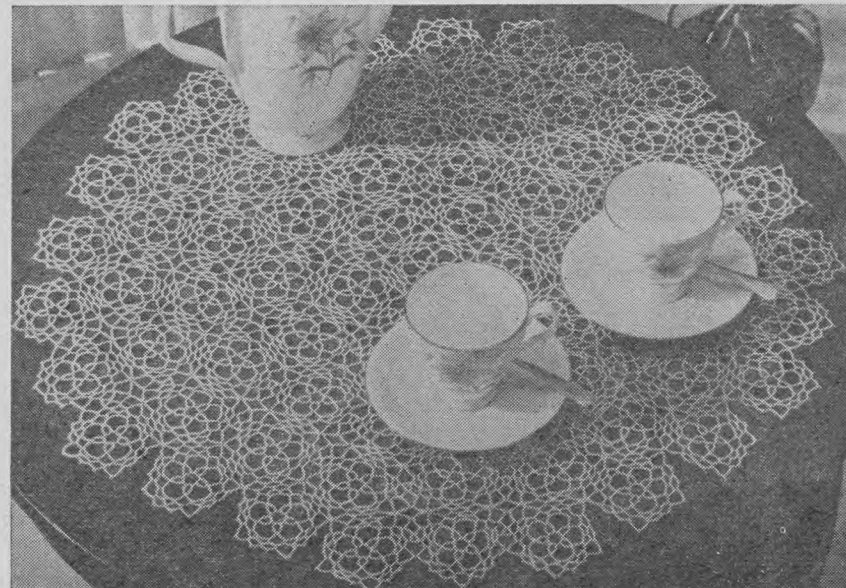
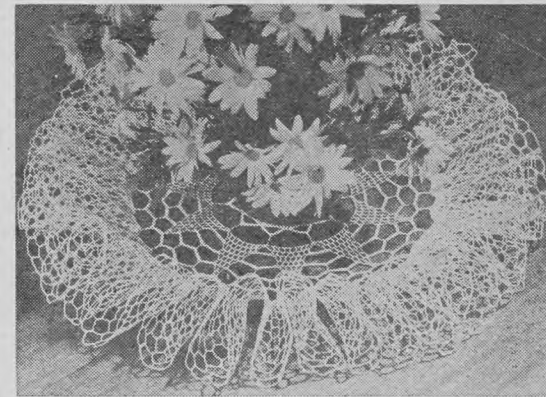


Minaret is the name given to this dainty doily which combines knitting and crochet stitches. Starched lightly when finished, doily measures 21" in diameter. For directions, order Leaflet No. S-392, price 10¢.



Popcorn stitch is used to accent a crocheted doily design called Kingfisher's Nest. For crochet instructions, order Leaflet No. CD-123, price 10¢.

A generous ruffle trims the open crocheted center of a 15" doily design called Thistledown. Order Leaflet No. D-119, 10¢, for crochet instructions.



For tatting instructions for this 21" mat, order Leaflet No. T-8371, 10¢.

For handicraft patterns pictured above please address your order to Country Guide Needlework Dept., 1760 Ellice Ave., Winnipeg 21, Man.

Striped fabrics accent Wardrobe-Making Patterns



3092



3122

3143

No. 3122. Misses' co-ordinates include a button-front coat or dress with patch pockets and belt; V-necked shift jumper; and overblouse; turtle-necked dickey; long pants and short shorts. Misses' sizes 10, 12, 14, 16, and 18; price 85¢.

No. 3143. This wonder wardrobe features a sleeveless boxy jacket with flaps and top stitch trim; scoop-necked tank-top overblouse elasticized at hem; pressed pleat skirt; slims and Bermuda shorts. Misses' 10, 12, 14, 16; 75¢.

No. 3092. Girls' sportswear co-ordinates include the shift and shirt with contrast band shown, a jacket with or without sleeves; box pleated skirt and slims or shorts. 4, 6, 8, 10, 12, 14; 70¢.

No. 3051. A rugby shirt or shift may be made cuffless or with contrasting cuffs, collar and belt. Sub-teen 8S, 10S-12S, 14S; Young Jr. and Teen 9-10-11; 12-13; 14-15-16. Pattern price 60¢.

3051

Country Guide Pattern Department

1760 Ellice Ave.,
Winnipeg 21, Man.

Box 4001, Terminal "A",
Toronto, Ont.

Please send Butterick

(No. C.O.D. orders, please)

Pattern No. _____ Size _____ Price _____

Pattern No. _____ Size _____ Price _____

To _____

The Milky Way

IN THIS AGE of new foods, quick foods, concentrated foods and limited-calorie bulk foods, it's reassuring to remember there's no fully satisfactory substitute for the basic dairy product we recognize as Nature's most nearly perfect food — milk. It's timely, too, because June is Dairy Month.

The fat, carbohydrate, and some of the proteins in milk provide us with energy. The body-building protein in milk is of high quality, and quantity, too! One quart of milk provides the same amount of protein as 7 eggs; as 1/3 pound of cheese; or 3 servings of fish. Vitamin A is present in cream, whole milk, and other dairy products which contain the milk fat. Dairy products provide vital amounts of riboflavin and thiamine, two of the B vitamins. In terms of riboflavin, 1 quart of milk contains the equivalent of 3 pounds of spinach, 2 1/2 pounds of beef, or 15 eggs. One pint of milk provides as much thiamine as 4 slices of whole wheat bread. Milk contains a generous amount of the calcium needed to build strong bones and teeth, and to regulate muscle and nerve activity. One quart of milk provides as much calcium as 58 eggs, or 8 pounds of carrots.

Milk and the other dairy products add extra goodness to the foods you serve on a picnic, for snacking, and for daily fare.



Crispy Crust Chicken, light and tender Sesame Cheese Squares, and chocolate-frosted butter-rich Marble Bars lend special goodness to a Dairy Month picnic

Crispy Crust Chicken

- | | |
|---------------------------------|--------------------------------|
| 6 chicken pieces | 1 c. buttermilk |
| 3/4 c. sifted all-purpose flour | 1 1/4 c. fine dry bread crumbs |
| 2 tsp. salt | Fat for deep frying |
| 2 eggs | |

Preheat oven to a moderate temperature of 325°F.

Wipe chicken pieces with a damp cloth. Sift together the flour and salt. Beat eggs well; stir in buttermilk. Add flour mixture and beat with a fork

Sesame Cheese Squares

- | | |
|-----------------------------|--|
| 1 T. butter | 1 c. (1/4 lb.) shredded cheddar cheese |
| 1/2 c. finely chopped onion | 1 T. sesame seeds |
| 1 egg | 2 T. butter, melted |
| 2/3 c. milk | |
| 2 c. packaged biscuit mix | |

Preheat oven to a hot temperature of 400°F. Grease an 8" square cake pan.

Melt the 1 tablespoon butter in a frying pan. Add onion and cook slowly until just tender, but not browned. Beat egg well; stir in milk, onion and half the cheese. Add biscuit mix and mix lightly with a fork until just combined. Spread dough in prepared pan. Sprinkle top with remaining cheese, then sesame seeds. Drizzle with the 2 tablespoons melted butter. Bake 20 to 25 minutes. Cut in 9 squares and serve warm or cold with butter.

Marble Bars

- | | |
|-----------------------------------|-------------------------------------|
| 1 3/4 c. sifted all-purpose flour | 2 tsp. vanilla |
| 1/2 tsp. salt | 1 c. chopped nuts |
| 1 c. soft butter | 2 oz. unsweetened chocolate, melted |
| 2 c. sugar | |
| 4 eggs | |



relaxing

...Postum gives your nerves a 'holiday'. It's a wholesome and healthful beverage that contains no caffeine, as found in tea and coffee. You can drink as many cups of Instant Postum as you like. Take a break and unwind with a hot cup of **CAFFEIN-FREE POSTUM.**



Preheat oven to a moderate temperature of 350°F. Grease a 9" by 13" cake pan.

Sift flour and salt together. Cream butter; gradually beat in sugar. Add eggs, one at a time, beating well after each addition. Gradually add flour mixture, combining lightly after each addition. Mix in vanilla and chopped nuts. Divide batter in half; stir melted chocolate into one portion. Drop chocolate and plain batters alternately by teaspoonfuls into prepared pan. Draw a knife through the batter several times to produce a marble effect. Bake 40 to 45 minutes. Cool completely, then frost with Chocolate Butter Cream. To serve, cut crosswise into 8 strips and cut each strip in 3 bars.

Chocolate Butter Cream

2 oz. unsweetened chocolate
1/4 c. soft butter
1 egg
2 c. sifted icing sugar
1/2 tsp. vanilla

Melt chocolate over hot water; cool. Cream butter, add cooled chocolate and egg and beat to blend. Gradually beat in sifted icing sugar and vanilla. Spread on cold Marble Bars.

Apricot Orange Torte

Meringue Crust

2 egg whites
1/4 tsp. baking powder
3/4 c. sugar
1/2 c. chopped walnuts
1/2 c. soda cracker crumbs (ten 2" crackers)

Preheat oven to a moderate temperature of 350°F. Generously butter a 9" pie plate. Beat egg whites and baking powder until frothy. Add sugar gradually and continue beating until meringue is very stiff. Fold in walnuts and cracker crumbs. Spread evenly in pie plate and bake 30 minutes. Cool thoroughly before filling with the following mixture.

Filling

1 c. evaporated milk
1 pkg. apricot-orange flavored jelly powder
1 c. orange juice
1/2 tsp. lemon rind
1/4 c. sugar
2 T. lemon juice

Chill evaporated milk in an ice cube tray until ice crystals form around edge. Bring orange juice to a boil; add jelly powder, lemon rind and sugar, and stir until jelly powder and sugar are dissolved. Chill until mixture begins to set.

Whip chilled milk and lemon juice until frothy. Fold in thick jelly mixture. Pile into cooled meringue shell and

garnish with an orange twist and mint leaves, if desired. Yields about 6 servings.

Honey Nut Flip

5 c. cold milk
1/4 c. honey
1/4 c. creamy peanut butter

Cream honey and peanut butter until well blended. Gradually beat in 1/2 cup milk. Pour in remaining milk; mix well. Serve immediately. Yields about 6 servings.

Tuna Puffs

4 eggs, slightly beaten
2 c. soft bread crumbs
1 tsp. salt
1/4 tsp. pepper
1 T. minced onion
1/4 c. chopped green pepper
2 c. milk
7-oz. can tuna fish
10-oz. can cream of mushroom soup

Preheat oven to moderately hot temperature of 400°F.

Drain tuna fish. Combine tuna with eggs, crumbs, salt, pepper, minced onion, green pepper and milk, and pour into individual casseroles or custard cups. Place in a pan of warm water and bake about 50 minutes, or until set.

Heat undiluted soup in a saucepan and serve as sauce for puffs. Yields about 6 servings.

Savory Corned Beef Ring

1 T. prepared mustard
1 c. soft bread crumbs
1/4 c. finely chopped onion
2 T. finely chopped green pepper
2 T. butter, melted
1/2 tsp. pepper
2 c. canned or cooked corned beef, chopped
1 c. milk
2 eggs, slightly beaten
Cooked vegetables or salad greens

Preheat oven to a moderate temperature of 350°F.

Combine mustard, bread crumbs, onion, green pepper, butter, pepper and corned beef; mix well. Stir milk into eggs and add to meat mixture. Mix well. Pour into a well-greased 1-qt. ring mold. Place mold in a baking pan on rack in oven; pour hot water into baking pan to a depth of 1". Bake about 30 minutes, or until a knife inserted in the ring comes out clean. Unmold. To serve hot, fill the center of the ring with hot cooked vegetables. To serve cold, garnish with salad greens. Yields about 6 servings.

Fruit Cream Pie

1/2 c. sugar
3 T. cornstarch
1/2 tsp. salt
1 1/2 c. evaporated milk
1 c. water
3 egg yolks
1/2 tsp. vanilla
Sweetened fresh fruit

Combine sugar, cornstarch and salt with evaporated milk and water in saucepan and place over low heat or in the top of a double boiler over boiling water. Cook until slightly thickened (about 12 to 15 minutes), stirring occasionally. Add a small amount of the cooked custard to the egg yolks. Mix and pour into remaining custard over heat. Stir and cook 3 to 4 minutes longer, or until thickened. Add vanilla. Fold in 1/2 cup to 3/4 cup sweetened fresh fruit (well-drained canned fruit will do) and pour into baked 9" pie shell. Garnish with whole fruit or pieces.

Spice Drops

1 c. evaporated milk
1 T. vinegar
1/2 c. shortening
2 c. brown sugar
2 eggs
4 c. sifted pastry flour or 3 1/2 c. sifted all-purpose flour
1 tsp. baking soda
1/2 tsp. salt
1 tsp. cinnamon
1 tsp. ground cloves
1 tsp. allspice
1/4 tsp. nutmeg
3 c. raisins
1 c. chopped nuts

Preheat oven to a moderately slow temperature of 325°F.

Stir vinegar into the evaporated milk to sour it.

Blend shortening, sugar and eggs until light and fluffy. Add soured evaporated milk; mix well. Sift remaining dry ingredients together and add with raisins and nuts to the shortening mixture. Mix well. Drop from a teaspoon on greased cookie sheets and bake about 15 minutes. Remove cookies from sheet and place on racks to cool. Ice with one of the following frostings, if desired. Yields about 7 dozen cookies.

Creamy Butter Frosting

1/3 c. evaporated milk
1 tsp. vanilla
1/4 tsp. salt
3 c. sifted icing sugar
1/4 c. butter

Combine all ingredients except the butter in a mixing bowl. Beat until smooth. Add butter and beat until creamy.

Creamy Orange Frosting

1/4 c. evaporated milk
2 T. orange juice
1 T. orange rind
1/4 tsp. salt
3 c. sifted icing sugar
1/4 c. butter

Combine all ingredients except butter in a mixing bowl. Beat until smooth. Add butter and heat until creamy.

Sausage Bake

1 lb. pork sausage meat
1 c. chopped onion
16-oz. pkg. macaroni
10-oz. can cream of celery soup
3/4 c. milk
3 eggs, slightly beaten
2 c. shredded sharp cheddar cheese
2 c. corn flakes, crushed
1 T. melted butter

Preheat oven to a moderate temperature of 350°F.

Brown meat and onion lightly, then spoon into bottom of an ungreased 8" by 8" by 2" baking dish. Cook macaroni according to package directions; drain thoroughly and spoon over meat. Combine soup and milk in a saucepan and heat; slowly stir hot mixture into beaten eggs. Stir in cheese and pour over macaroni. Mix corn flake crumbs with butter, and sprinkle on top of casserole. Bake 40 to 45 minutes. Yields about 6 servings.

Stuffed Baked Potatoes

6 large baking potatoes
1 to 1 1/2 c. hot milk
2 T. butter
1/8 tsp. pepper
1 c. grated cheddar cheese
2 c. minced, cooked ham or leftover meat
3 T. chopped parsley

Bake potatoes in a hot oven at 425°F. until done (3/4 hour to 1 hour). Remove potatoes and reduce oven heat to moderate at 350°F. Cut a slice off the top of each potato and scoop out center. Mash potato, add hot milk, butter, pepper and cheese, and beat until light and fluffy. Fold in minced ham and parsley. Fill potato shells and bake at reduced temperature for 30 minutes, or until hot and lightly browned on top. Yields 6 servings.

NEWS

from the BUREAU

The 'June Set-aside' is now a thing of the past, replaced by a new year-round deduction system based on one-quarter of one percent of income for milk and cream sales. (Local variation sometimes sees a larger amount collected for a shorter time but the total collection is the equivalent of the year-round plan).

With most dairy farmers co-operating, the Canadian Dairy Foods Service Bureau is able to spend some \$850,000 this year to promote the sale of milk and the products made from milk. In addition to a healthy nation-wide advertising program which utilizes national radio, newspapers, magazines and billboards, the Bureau is actively engaged in other types of promotion.

Nearly 7,000 food stores, which collectively account for well over half of Canada's retail food business, are using Bureau materials regularly. These include virtually all chains and voluntary buying groups. The list of co-operators reads like a 'who's who' of Canadian food retailing.

The Home Services Department is continuing its effective and helpful service to consumers through mass communications media. More than 400 newspapers, magazines, farm papers, radio and TV stations make regular use of the Bureau's recipes, scripts, photos and anecdotes.

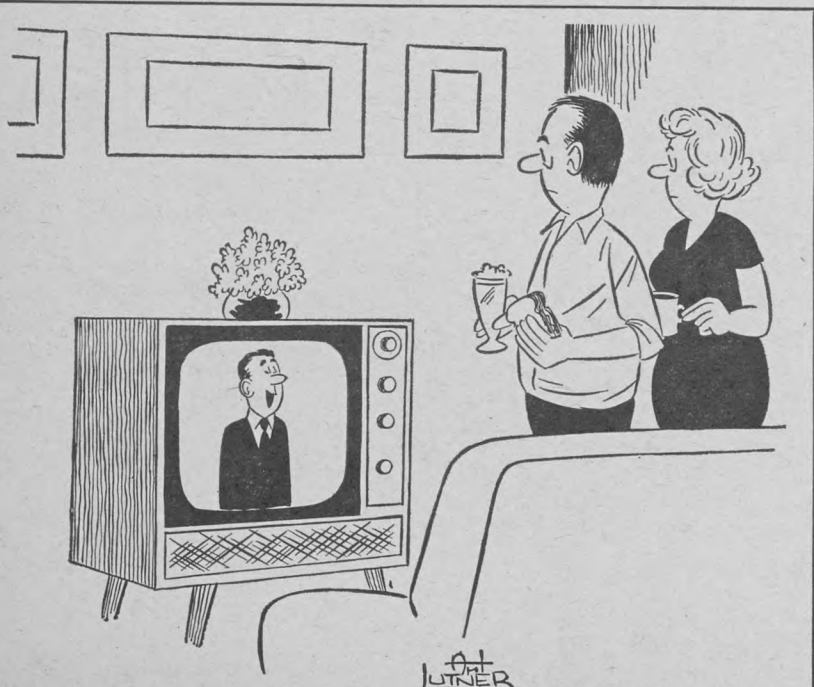
'June is Dairy Month' is but one of the Bureau's major 1964 promotions but it is certain to be the best supported. Other dairy advertisers are rallying to make this an industry-wide promotion of the highest order. The Bureau is supplying advertising mats, radio tapes, billboard posters and other advertising helps to would-be June advertisers.

These are some of the ways that Set-aside dollars are used to help improve the market for milk and cream off the farm. The officers of the Bureau represent producers in every part of Canada and were selected for the specific purpose of seeing that all Set-aside dollars are spent wisely and well. This advertisement is a 'report back' to those producers who have not been informed through other channels.

If you wish more detailed information write to:



THE CANADIAN DAIRY
FOODS SERVICE BUREAU
147 Davenport Rd., Toronto 5, Ontario



"Now that you're all back from your kitchens, we'll have that word from our sponsor I mentioned several minutes ago."

I Wish

I take my rubbers off, myself,
Hang up my coat below that shelf,
And I say "Please," and "Thank
you," too,
When I remember to, don't you?
I wish someone would say, someday,
"You help a lot when you're that
way."

—FRANCES CREWES

Come out of the wilderness



Join civilization!

Join the millions of smart, young moderns who use Tampax.

It's civilized, urbane, smart to use sanitary protection that never betrays you in any way. Never by odor. Never by bulges. Never by telltale outlines. Never by making you feel or look strained, uncomfortable.

Tampax is out of sight, out of mind. Completely comfortable . . . and the silken-smooth applicator makes it so easy to use. Why not feel clean, fresh with Tampax? It's just as if it weren't one of those days for you.

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Tampax internal sanitary protection is sold in your choice of 3 absorbency-sizes (Regular, Super, Junior) wherever such products are sold. Canadian Tampax Corporation Limited, Barrie, Ontario.



Invented by a doctor—
now used by millions of women



JOHNNY
and

JENNY



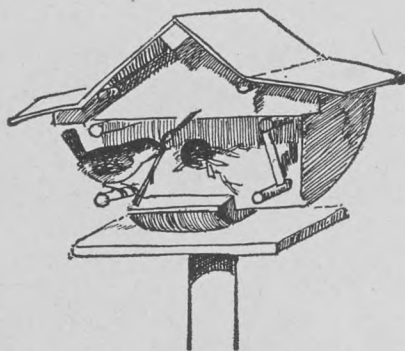
The Homemakers

Story and drawings by
JANET D. SCHINTZ

"WHOO-OO-OOOOH," shouted the West Wind as he rushed across the big blue sky. "Clouds! I'll have some fun with them!" He puffed and he blew and he puffed and he blew with his mighty breath.

"Oh . . . oh . . . oh . . . be quiet, do," wept the puffy white clouds, "you are blowing us to shreds!"

"Aha," he roared, "tears, eh? I think they could do with some of those on earth." With that he sent a short sharp shower of rain pelting to the ground and over a small log house below him.



Plinkety — plonk! It sounded on the roof of a birdhouse where a little brown bird was busy pushing a beakful of sticks and straw through a small, round doorway. "Bother," he chirped, as he shook raindrops from his feathers, "I think I'll just shelter in those bushes until the rain is over." Off he flew.

He didn't wait very long. Then the clouds mopped up their tears, the sun shone brightly and soon he flew back again. This time he carried a twig that seemed far too big for even his busy little body.

"How am I going to get this through the hole?" he asked himself.

He pushed. He tugged. He tried one way. He tried another way! At last, after much struggling, one end popped in, and the rest soon followed.

"Good for me," he piped proudly as he hopped back to view his handi-

work, his beady eyes twinkling and his tail cocked up saucily. "This is worth singing about," he chirruped as he took cover in a rosebush and burst into song.

The next day he was up bright and early, putting the finishing touches to the nest. "I'd better keep at it," he said to himself. "Jenny will soon be coming and I'd like to have a comfy home ready for her! I'll make more than one. Then she can choose the one she likes best."

You see, this was Johnny Wren, a little busybody who had just flown up from the warm southland where he had spent the winter.

Now he winged his way toward a shed near the back of the house. Just outside the shed there was a broken flower pot. "Aha," his cheery voice piped, "now that's a good thing to build in." Just then he caught sight of a watering can. "Well, I don't know," he wondered. "That's even better. Or let me see now. That old straw hat would make a nice home too. Jenny might fancy that. Perhaps I'd better try building in all of them." And he did.

At last Jenny arrived, "How glad I am to be back," she sang, "and how clever of you to find me," answered Johnny, fluttering happily around her. "Come and see all the lovely places I have made for nesting." One



would think that Jenny was delighted with his efforts. Alas, this was not so. She inspected them all—the birdhouse, the flower pot, the watering can, the old straw hat. She turned up her beak at all of them.

"I see a much better place," she snapped as she led Johnny round the corner to a group of poplars where another bird-house had been fixed to a branch.

"This is a suitable spot," she chirped. She started to collect twigs and bits of dry grass at once.

"You may change your mind," retorted Johnny. "Anyway, I'll finish what I started." And he turned his back on her and went right on building his own favorite home. ✓

(The first of two stories)

Mother Goose Fun

by HELEN PETTIGREW

Move up, across, in any direction, one letter at a time. Can you find a Mother Goose answer that tells where somebody is? Use every letter but don't use any letter more than once. We'll give you a clue: Begin with U and end with P.

		U		
A	F	K	N	E
S	A	C	D	R
A	T	T	Y	T
L	S	S	A	H
E	E	P	H	E

Answer

E	H	P	E	E
H	V	S	S	L
L	I	I	I	V
R	D	C	V	S
E	N	K	F	V
		U		

Games Along the Way

Town or City Game came about through our passing through many cities and towns on a long trip. It is played like this: The name of a town is mentioned, the next person must name another town whose name starts with the last letter of the first town, and so on until some one fails. Only Canadian towns and cities may be used, or any ones in other countries, if preferred. For instance, if Toronto is named first, Ottawa might follow, then Athabasca, and so on. Sounds difficult, but try it and see! As a geography aid and to make the game even more difficult, the provinces in which towns or cities are located may be required also.—L.P.B. ✓

YOUNG PEOPLE

Education Is a Good Investment

YOUR STAY IN SCHOOL may be determined by your opinions about the value of education. Here's a true and false test from a recent issue of the New Brunswick 4-H Club Newsletter to help you evaluate your opinions.

- | | TRUE | FALSE |
|---|--------------------------|--------------------------|
| 1. If you drop out of school at Grade 8, your salary through life will be about \$40,000 less than if you complete Grade 12. | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Education has very little to do with one's salary: I know many uneducated people who are successful in business..... | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Our parents and teachers would be delighted to see us complete High School but a Grade 10 or 11 is quite sufficient for most of us. | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. I should not be concerned about dropping out of school..... | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Present-day unemployment is due to the extensive use of machines. | <input type="checkbox"/> | <input type="checkbox"/> |

Answers:

- True: It has been scientifically proven that each year of High School adds about \$238 a year to one's income and the matriculation year alone adds \$466 a year, which amounts to over \$40,000 in a lifetime.
- False: There may be a few exceptions but *more education means higher income and less education means lower income.*
- False: About 70 per cent of all jobs in Canada require at least a Grade 12 education.
- False: You definitely should be concerned: 70 per cent of all students drop out before completing Grade 12.
- False: The major cause of unemployment is a general lack of education rather than the extensive use of machines. V

Make a Memory Book

by DOROTHY HEDBERG

NO DOUBT MANY OF YOU keep diaries, autograph books and snapshot albums. Another book you might enjoy, both now and in the future, is a memory book. In this book you put anything you'd like to keep to look back on when you are older. For example, you might put your school awards in it, a few of your best drawings or paintings from each year's schoolwork and items on subjects you enjoy. Perhaps you would like to keep pictures of your term teachers, favorite chums from each class, and clippings of poems and short stories you have enjoyed.

For such a book, a loose-leaf binder with dividers for the years, or terms, is a good choice. For the cover, use a picture somewhat longer than the binder or notebook. This way you can tuck the edges inside and glue them firmly, or secure them on the underside with Scotch tape. To title your book you could cut out the letters from white or colored paper and glue them on neatly. Your title might be "Memories," "School Days," "Memory Garden." Or compose a title of your own. You can add your name and age in the same way in somewhat smaller letters, or you can use a felt marking pen if you prefer.

Keep your memory book neat so that you will be proud to bring it out

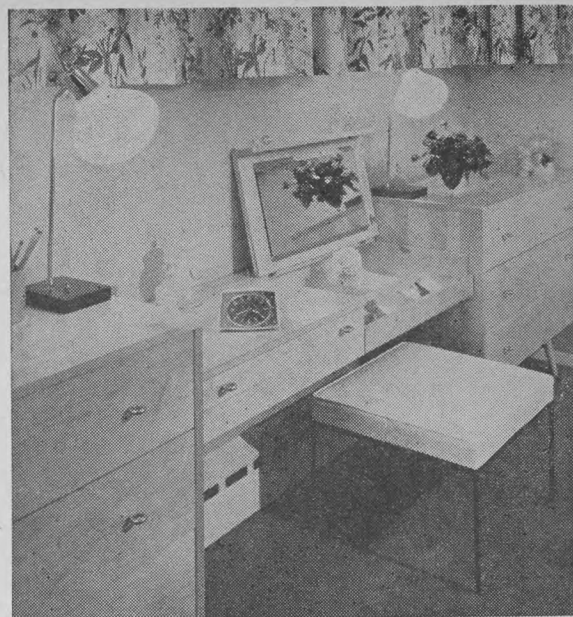
in the future. Then, if you meet one of your former schoolmates or playmates when you are grown up, imagine what fun it will be to review together the things you did, the interesting things you saw or made together so long ago!

It would be especially interesting to see your individual drawings of the same subject, and to compare how each of you worked at that time. You would have fun comparing, and perhaps even laughing over the entries which you found so striking at the time. You'll probably find you have a book you will cherish for a lifetime. V



Diplomatic Decorating

The 2-daughter family calls for diplomacy in decorating. In the girls' room that is illustrated shades of pink, cherry red and white have been attractively combined. The chintz draperies feature all three colors and they are repeated in pink walls, red carpet, white stools and white corduroy bedspreads. Twin vanities and chests can also help to solve sharing problems for two sisters in the same room.



If you are 16

Here's one way you can be sure of success

Join the Canadian Army's Soldier Apprentice Plan. This way you can get going in a man's world, earn a man's sort of money and do a man's job.

The Army's Soldier Apprentice Plan gives you a chance to prove yourself in any one of more than 20 trades. You have all the advantages and friendship of the regular soldiers, you're given every opportunity to further your education, to take part in sports, and you lead an exciting and challenging life.

Contact your local Army Recruiter now for full details on courses starting in September. Applications are considered in the order they are received. Grade 9 is required (Grade 8 in Quebec). Apply now for enrolment in a career with a fine future.



To: DIRECTORATE OF MANNING, ARMY HEADQUARTERS, OTTAWA, ONTARIO

Please send me, without obligation, details on career opportunities under THE SOLDIER APPRENTICE PLAN.

Name

Address

City/Town.....Province

Age.....Phone No.....

Last school grade successfully completed

E64-113

WHY IRRIGATE FORAGES?
(Continued from page 13)

There are other factors to consider too. Sprinkler systems, for instance, are more expensive than flood irrigation systems, says engineer Murray. They cost more to operate and have higher labor costs than well-designed flood systems on suitable land. On the other hand, he adds, flood irrigation systems have been unsatisfactory in some areas, or on poorly prepared land. Also, successful flood irrigation requires a better understanding of the fundamentals of water application.

Murray adds that in the years just ahead, the main use of small irrigation projects in his province will be for growing forage crops as livestock feed.

PASTURE MANAGEMENT

It takes careful management to get full benefit from an irrigation system. McCaig reports that he split his Jersey herd into three groups. He strip-grazed the pasture, moving the fence every morning. He also clipped and harrowed the pasture before each application of water. He reports that his original 27 acres of pasture was irrigated four times — once in June, twice in July, and again in September. Rain that fell

in August took the place of an irrigation.

Each time he irrigated, he put on about 3 inches of water. He soil-tested the fields too and in July applied 100 lb. of nitrogen to 18 acres. After July 17, he rotated the cows onto second growth after hay, and onto the old pasture fields.

McCaig uses the following seed mixture for both hay and pasture fields: 35 per cent Vernal alfalfa, 5 per cent White Dutch clover, 20 per cent Climax timothy, 10 per cent Ladino clover and 30 per cent Lincoln brome-grass.

Researchers at Kamloops report that grass-legume mixtures fit into a planned crop rotation particularly well if an irrigation program is planned, although legumes such as alfalfa or Ladino clover can be seeded alone if bloat is not a problem. Grasses are suitable by themselves if the soil is very fertile. The researchers report that they normally get 5 to 6 tons of alfalfa per acre for the first 3 or 4 years and then the yield drops considerably. However, a standard brome-orchard-grass-Ladino mixture provides 3 to 4 tons of dry matter per acre for more years and it is this mixture which has been giving 500 to 1,000 lb. of beef to the acre.

These researchers warn that irri-

gated pastures which are producing heavily, need plenty of fertilizer. Pasture grasses, they say, have shallow roots and much of their food is taken from the first foot of soil. Unless commercial fertilizer is added, forage yields will drop. Apply 100 lb. of nitrogen three times during the summer, they say, to help the legumes and grass stay in balance and to maintain high yields. If the legume in a stand is disappearing, the answer may be to put on phosphorus or sulphur or perhaps both. If the grass grows poorly, it can always be stimulated by adding nitrogen.

Most important of all, say the Kamloops researchers: regard pasture as a crop. Fit pasture into a well-balanced crop rotation. Don't keep any pasture indefinitely. A good rule is to take pasture out of production when it can no longer produce 500 lb. of beef per acre or the equivalent. They also advise seeding a new pasture every year or two so that at least one pasture field is fully productive at any one time.

**GAS-FIRED
ORCHARD HEATERS**
(Continued from page 16)

orchard. For general use, he favors the propane system of his friend Dr. Jim Marshall (Country Guide, April 1964) who has 1¼ acres of dwarf apple trees and cherries on a lower bench to the north.

Although propane gas is twice the cost of natural gas, the distribution system costs only half as much. Lines don't have to be buried as deeply, and plastic piping can be used. This eliminates the need for welded couplings.

"Of course, my system is still in the experimental stage," Jim Marshall pointed out, "but if it does what I hope it will, it's entirely practical as far as cost goes. Anyway, I'll have my answer in a few weeks." (The interview took place on April 20. There had been a threat of frost the previous night.)

Dr. Marshall's heating units are supplied by a 500-gallon propane tank. Under a pressure of 25 to 30 lb. per square inch it could supply gas for 2 to 3 acres.

Dr. Marshall, who recently retired as head of the Entomology Section, Summerland Experimental Farm, puts his propane heating system through some pretty rugged tests. His alarm doesn't go off until the temperature in his orchard drops to 30°F. Then he throws on a jacket and goes out. Knowing that blossoms can stand up to 28° before damage occurs, he lets the temperature go to 29° before firing up.

Unlike Don Wright's system, which has individual shutoff cocks at each burner, Jim Marshall's frost protector has a single valve that is turned on at the tank. Using a propane torch, he can ignite all his burners in 5 minutes. The heat comes on at once.

"If these burners work in my orchard they should work anywhere," he said. "Dwarf apple trees and cherries are about the worst

things you can raise in a frost pocket like this."

Growers who operate in a natural frost pocket should take advantage of their location whenever they can, Dr. Marshall believes. One way such a location works in their favor is in control of the codling moth, the key insect of the Okanagan area.

"The codling moth doesn't lay eggs when the temperature goes below 60° at sundown," he explained, "but it doubles its egg laying for every degree above this point. That means people who operate in a frost pocket don't have to spray as much as growers in warmer locations. You shouldn't spray just because other growers in the district are doing it. There's a lot of needless spraying of DDT. This kills off a lot of robins and bluebirds and brings on a mite problem. Anyway, it's foolish to accept the handicap of your frost pocket and not take the advantage it offers of cheaper pest control."



MULTI-PURPOSE PONDS
(Continued from page 17)

— and that's a lot of protein!" In actual practice in southern Ontario the yields per acre have run from 115 pounds down to only a few pounds. Where success with trout has been greatest, the ponds have been specifically built for the purpose and have been properly managed. Recreational and even commercial trout fishing have prospered best in Dufferin County where marginal land and abundance of spring water have been utilized.

The trout harvest depends on several key factors. For instance, winter kill must be minimized by digging ponds 10 to 15 feet deep, and by providing, if possible, a winter inflow of water to supply oxygen. A water temperature range of 55 to 68 degrees is best for trout. "Temperature is all important," says Stan Brown, manager of the Provincial Fish Hatchery at Sandfield. "The speckled trout like cold running water but we have found that the Rainbow trout will tolerate higher temperatures."

Don't forget to go fishing, once the fish reach an acceptable size, either — many ponds are underfished.

Monarch

**FASTEST
SELLING
QUALITY
PUMPS
IN CANADA**

MONARCH MACHINERY COMPANY LTD.
WINNIPEG LONDON VANCOUVER

News Highlights

(Continued from page 11)

FERTILIZER GOES NORTH

When officials of Northwest Nitro-Chemicals Ltd. read in Country Guide (January 1964 issue) that the Bradleys of Pelly River could use some fertilizer, they decided to find out just what a treatment of fertilizer could do to boost yields on a commercial farm in the Yukon. Last month they shipped half a ton of 33.5-0-0 and 11-48-0 to Midway Lodge, which is about midway between Whitehorse and Dawson. Forest officials at Whitehorse were contacted and they alerted the Bradleys via radio that the fertilizer would be arriving. Then Dick Bradley came out through the mud and melting snow of their 26-mile tote road to get it.

The limiting factor in livestock production in these northern areas is the winter feed supply. If applications of chemical fertilizer can

increase yields to a notable degree on a full-scale farming operation, it will show one way the winter feed problem can be licked. The limiting factor in the use of fertilizer here, of course, is the long freight haul which can almost triple fertilizer costs. But the press of future events could change this.

Northwest didn't donate and ship the fertilizer in the hope of a rush of orders from the sub-Arctic. This is looking a long way ahead to the day when we might have to utilize our far northern areas for the production of beef. It is in line with studies now going on at Lethbridge Research Station, under Dr. Ed Hess, to learn the physiological changes cattle undergo when moved to a colder climate (Country Guide May 1963). Any knowledge gained which will help us to extend the frontiers of beef production is a step in the right direction.—C.V.F. v

Farm Groups

WOOL GROWERS MEET

Canadian Co-operative Wool Growers Ltd. reported at their annual meeting an operating surplus for the year, before providing for taxes on income, of \$60,000. Total assets of the organization are \$685,000. v

MANITOBA FARM ORGANIZATIONS MERGE

Manitoba's Farm Organization Liaison Committee, which has been dealing with the troubles of farm organizations in the province, has reached general agreement. All those groups in attendance at a recent meeting, except the Manitoba Farmers Union, endorsed the action which was taken to provide the province's farmers with a coordinated and stronger voice. The meeting agreed to terminate the activities of the Farm Organization Liaison Committee. However, the Committee would reconstitute itself as a Conference of Agricultural Organizations which would work toward a more formal organizational structure within a year and which would seek to agree on the development of agricultural policy. All interested agricultural organizations were invited to elect two representatives to the Conference and the first meeting was convened under the chairmanship of Dr. Sol Sinclair of the University of Manitoba. W. S. Forrester of Emerson was elected chairman pro tem and R. O. Douglas of Winnipeg, secretary pro tem.

MFU President H. J. Andresen stated that his organization could not endorse the new organization because: (1) It has no definite constitutional structure or procedure. (2) It does not recognize the farmer as the master of his enterprise or the power in agriculture. (3) It is not restricted to farmer membership decision and control.

The organizations which have

been involved in the development of the new Conference include the following: Dairy Farmers of Manitoba; Hog Producers Association of Manitoba; Vegetable Growers Association of Manitoba; Canadian Co-operative Implements Limited; Manitoba Farmers Union; Manitoba Federation of Agriculture; Manitoba Dairy and Poultry Co-op Limited; Manitoba Turkey Growers Association; Manitoba Beet Growers Association; Manitoba Seed Growers Association; Manitoba Pool Elevators; United Grain Growers Limited; Manitoba Women's Institute; Manitoba Stock Growers Association; Manitoba Co-operative Honey Producers Limited; and Winnipeg Milk Producers Co-operative Association. v

The Canadian Council of 4-H Clubs, meeting in Charlottetown, reported a new high in 4-H club member enrolment in 1963 of 70,705. v

The National Farmers Union has charged in a statement submitted to the House of Commons External Affairs Committee studying the Columbia River Treaty that the Treaty as visualized is not in accord with the desirable water resource development policy for Canada. It urged adequate consideration to alternative uses in Canada at some of the water of the Columbia River basin that will now flow into the United States. v

Saskatchewan's egg producers will provide 200 dozen eggs for the "good egg breakfast" to be served to delegates attending the Fifth International Square Dance Convention which will highlight the "Good Egg Week" June 15-20 in that province. The occasion is designed to promote and publicize the egg producing industry in the province. v

Roll with the best!

MILD- BUT WITH A SATISFYING TASTE



Smoother rolling—by hand or machine

- Ranchers! 'BETTER WATER
- Farmers! PROTECTION
- Stockmen! For YOUR STOCK'

with ...

"SLIME-X"

- "Algae" eliminated
- Slime conditions vanish from STOCK TROUGHS

Registered No. 8750 (P.C.P. Act)

PATENTED FORMULA GIVES:

- Constant service with minimum attention.
- Years of service — no added investment.
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Prepare For The "Hot Summer Days" NOW!

Order while stock is available \$11.95 Ppd.

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SLIME-X ... BUY ONE ... TEST IT ... GET RID OF ALGAE IN YOUR WATER TROUGHS. Not designed for Swim Pools.

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(DIVISION OF PEERLESS MOTOR PRODUCTS LTD.)

Letters

Approval

I have always enjoyed your paper and now I look forward to Let's Think It Over, by Very Rev. M. L. Goodman. Your stories are a treat to what we read in most magazines today. I enjoy the poetry very much,

also the Women's page. My grandchildren like the children's stories.

Mrs. L.B.P.,
New Westminster, B.C.

Half-baked Hunting

This being a free country, I would like to give my version of the expression, "sportsman." A fellow told me when I came to this country that on a hunt, one took two boxes of beer and one box of shells and by

evening there were even a few shells left. I call that giving the birds a chance. I was raised on a farm and animals meant something so I went to the gun club and spent long years learning the "ropes" or whatever you call it. I was always bothered when a bird went on its way after I had fired, because as sure as Sunday, it was wounded. But when the depression came on and I had a 22, I shot the snowshoe hares through the head for instant kills because I needed the meat and you can give me any name you darn well please. Don't ask me what I call half-baked fellows who give every bird a chance to carry some of their pellets in its hide!

C.E.T.,
Transcona, Man.

Admire Good Horses

We are writing to correct what we feel was an unfortunate impression created by the last couple of paragraphs in Mrs. Burpee's article on Arabians (May 1964).

What we feel she must have meant to say is that an Arab horse, properly trained, can compete creditably (while not necessarily winning) against any breed in cutting, but certainly it was not intended to

detract from any other breed, or the breeders thereof. Many of them are our friends (we hope!) and we have never claimed to have a monopoly on cow horses.

Obviously, as Arabian breeders, we have a preference, and likely are as biased as any other breeder, but we admire and respect a good horse of any shape or color, and would like to go on record as saying so!

MR. & MRS. JIM CARTWRIGHT,
High River, Alta.

Likes Recipes

I enjoy your women's section immensely. It's so much more practical and useful than most women's magazines. The recipes are useful and not gourmet style and price.

MRS. D.D.,
Lethbridge, Alta.

Wants Puzzle

I think it would be nice if you included a crossword puzzle in your wonderful magazine. It would help break the monotony of a bleak evening and as a former teacher, I think it would help the farm kids improve their vocabularies.

MRS. G.B.,
Glen Sutton, Que.

**NOW! Move
up to 1,800
bushels per
hour with 6"**

**Malco
GRAIN AUGERS**

Bonus Features:

- Undercarriages to fit all sizes and needs.
- Scissors-type undercarriage for long reach and high lift.
- Adjustable intake for feed control.
- Low-levelling motor mount with universal base—P.T.O. drive optional.

**Available in
convenient
28 ft., 35 ft., 41 ft.,
51 ft. lengths**

A variety of optional
accessories available

• Gear box guaranteed
for 5 years.

Malco
ST. BONIFACE MANITOBA

CANADA'S MAJOR MANUFACTURER OF SPECIALIZED FARM EQUIPMENT

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Allied Farm Equipment Ltd., 980 Pacific Ave., Winnipeg, Man. • Que-Mar Equipment, 2875 Rue St. Joseph, Lachine, Que. • Falcon Equipment Co. Ltd., 299 Danforth Rd., Toronto 13, Ont.; 530 First St., London, Ont. • Grain Belt Farm Equipment Ltd., 1920-1st Ave., Regina, Sask.; Quebec and 42nd St., Saskatoon, Sask. • Northwest Farm Equipment Ltd., 7th Ave. and 6th East, Calgary, Alta.; 14820-123rd Ave., Edmonton, Alta.

What's New? Check that section in this magazine for new ideas that can help you farm better.

MEN PAST 40

**Troubled with GETTING UP NIGHTS
Pains in BACK, HIPS, LEGS
Tiredness, LOSS OF VIGOR**

If you are a victim of any of the above symptoms, your trouble may be due to Glandular Inflammation—a constitutional disease for which it is futile for sufferers to try to treat themselves. Neglect of such inflammation may cause men to lose their vigor, grow old prematurely... and often leads to incurable conditions.

Most men, if treatment is taken in time, can be successfully non-surgically treated for Glandular Inflammation. If the condition is aggravated by lack of treatment, surgery may be the only chance. The mild non-surgical treatment has proven so effective it is backed with a Lifetime Certificate of Assurance.

WRITE FOR NEW FREE BOOK

The Excelsior Medical Clinic has a new Free Book, fully illustrated, that tells how these troubles may be corrected by proven non-surgical treatments. This book may prove of utmost importance to you. Write today.

Excelsior Medical Clinic, Dept. B8763,
Excelsior Springs, Mo.

HERDSMAN

American dairy farm of purebred Holstein cows desires to employ excellent milkers. Knowledge of farm equipment not essential. We pay good salaries, also furnish modern house, heat, electricity, and milk. Will advance transportation if needed. Write to Meridale Farms, 123 West 30th Street, New York, N.Y., and give experience, references, as well as salary asked.

Healing Substance In Preparation H Shrinks Piles

Exclusive Healing Substance Proven To Shrink
Hemorrhoids And Repair Damaged Tissue.

A renowned research institute has found a unique healing substance with the ability to shrink hemorrhoids painlessly. It relieves itching and discomfort in minutes and speeds up healing of the injured, inflamed tissue.

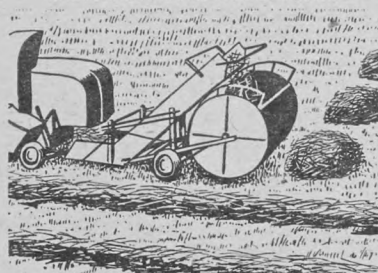
In case after case, while gently relieving pain, actual reduction (shrinkage) took place.

Most important of all—results were so thorough that this improvement was maintained over a period of many months.

This was accomplished with a new healing substance (Bio-Dyne) which quickly helps heal injured cells and stimulates growth of new tissue.

Now Bio-Dyne is offered in ointment and suppository form called Preparation H. Ask for it at all drug stores—money back guarantee.

DONOGH-STRAWBUNCHER



Gives you feed instead of bedding from your combine. For further information write:

CANCADE BROS., LTD.
Brandon, Man. Canada



Hi FOLKS:

I figured it was only a matter of time before the hucksters came up with a scheme to "sell" religion. Now I see by the paper where the United Presbyterian Church of the United States is all set to go on the air with church commercials to plug their product. To start off they have a series of radio spots devised by a fella who is described as a California comedian and ad man. Before he got the church account he used to sell such earthly items as chow mein and tomato paste.

As far as I'm concerned, faith is something that comes from the inside and no amount of TV or radio jingles are going to change my ideas one bit. In fact, they're not doing a very good job of selling me consumer goods right now. For one thing, I still have the Gray Sickness after years of watching a haggard, middle-aged woman change into a spritely nymph right before my eyes.

But if the U.P. Church fathers are looking for a good commercial I suggest they take the slogan of a well-known airline and just change it to read something like this:

"HEAVEN BOUND? GO UNITED ALL THE WAY!"

Knowing it's in a good cause, I offer this pearl without charge.

According to the paper, Detroit stations run 900 Presbyterian spots a week. Of those who heard these "commercials" 78 per cent said they had discussed them with friends and 6 per cent said they had talked them over with their ministers.

"That," said one church official, "is impact!"

Apparently, huckster terms are becoming popular with men of the cloth.

Not to be outdone by the Presbyterians, the Mennonite Church in the United States is using radio to plug a few "hard sell" slogans of its own:

"LIVE BIG! LIVE ABUNDANTLY, REALLY LIVE—TAKE THE GIFT OF LIFE THAT ONLY CHRIST CAN GIVE," is one of them, believe it or not. A typical jingle from the U.P. Church declares: "OUT ON A LIMB WITHOUT HIM?"

All this isn't too far away from such things as: "ARE YOU GUILT RIDDEN? SPIRITUALLY RUN DOWN?—TAKE PRAYER FOR FAST, FAST, FAST RELIEF."

Now I'm not saying these slogans don't contain some mighty good advice. It's just that the whole idea of religious commercials seems sort of out of place to me. Trouble is, if you complain, people say you're against progress and nobody wants to be accused of a thing like that.

All of which reminds me of an agricultural meeting I attended the other night. The speaker had just returned from an FAO project in Bechuanaland, East Africa, and he was saying how it was up to us to show these people how they can make progress. A fella in the audience asked him how many jails and insane asylums they had in Bechuanaland. Surprised, the speaker said he didn't think they had any. They hadn't found a need for them. Whereupon the questioner said maybe it was time to ask Bechuanaland to send somebody over here.

It seems to me we're heading for the day when some of these backward countries will have to set up missions over here to keep us from getting off the track.

Sincerely,
PETE WILLIAMS.

Homemakers' Hints

When making children's pajamas, I use foam-laminated fabric (foam side out) for the soles of the pajama bottom feet. I use the same method for replacing worn feet on ready-made pajamas. — Mrs. M. Hofer, Grosse Ile, Man.

To remove old wallpaper from a wall before repapering, mix vinegar and water in a bucket and sponge the wall with this solution. I used about 1 cup vinegar to each bucket of water to remove four layers of paper from the kitchen walls of an old house. When the solution soaked through, the paper pulled off easily. — Miss Diann Vail, Cambridge, N.S.

Tack a rubber stair tread to the seat boards of the youngsters' outdoor swing. The covering prevents splinters, and the seat dries quickly after a rain. — Mrs. Egil Erickson, Bergen, Alta.

I use coarse or medium sandpaper to remove fuzz from sweaters. It does a quick job and the sweater looks new again. — Mrs. Sara Fast, Gouldtown, Sask.

To prevent acid fruit such as strawberries and raspberries from staining the bottom of the lard pails we pick them in, I coat the inside of the pails with wax. To do this I put one-quarter of a slab of paraffin in a pail, and place in a warm oven until wax is melted. Working over a newspaper, I hold the pail with pot-holders and swirl the melted wax quickly to coat the pail surface evenly. Pour out extra wax.

The wax coating prevents the berries from discoloring. Before using the coated pails I rinse them in cool water. When the fruit season is over, I wash the pails with warm water and dry them out with facial tissue. — Mrs. Rita Chevigny, Williams Lake, B.C.

When canning rhubarb for winter use, I put a large package of raspberry or strawberry flavored gelatin in the kettle with the boiling rhubarb. The red jelly powder gives the rhubarb a nice pink color that won't fade. — Mrs. B. Hodgkins, Wellandport, Ont.

During the summer months we keep a cardboard fruit hamper "at the ready." In it we store such staples as tea, coffee, sugar and detergent in tight, closed tins; salt and pepper in sliding-top spice cans; wooden spoons; paper plates, cups and napkins; dish towels, terry towels and wash cloths. Then, when time permits and the weather co-operates, little time is lost in packing for a picnic trip.

When we travel by car we carry an empty round ice cream carton for use as a waste basket. It is leakproof and will hold fruit peels, sandwich scraps and wrapping papers. This reminds the children not to be litterbugs. — Mrs. A. Kruszelnicki, Vanguard, Sask.

TRADITIONAL SUMMER "MAGIC"

Fresh Strawberry Shortcake



Do you know how strawberries got their name?
In the 15th century, they were brought to market strung on straws... so, naturally, they were called *straw*berries!
For peak-of-season popularity, it's hard to outshine a light-hearted strawberry shortcake! First, bake it the "Magic" way. Add heaps of fresh, sweet strawberries. Top with lots of thick, whipped cream.
Magic Baking Powder assures you perfect results whenever and whatever you bake. It's a tradition with all good cooks:
Bake it with Magic—Serve it with Pride!

Individual Strawberry Shortcakes

- 2 cups once-sifted pastry flour or 1 3/4 cups once sifted all-purpose flour
- 3 1/2 tsps. Magic Baking Powder
- 1/2 tsp. salt
- Pinch of grated nutmeg
- 3 tbsps. fine granulated sugar
- 1/3 cup chilled shortening
- 1 egg, well beaten
- Milk
- Soft butter or Blue Bonnet Margarine
- Sweetened sliced strawberries
- Lightly-sweetened whipped cream
- 6 whole strawberries

Grease a cookie sheet. Preheat oven to 400° (hot). Mix, sift twice; then sift into a bowl, flour, Magic Baking Powder, salt, nutmeg and sugar. Cut in shortening finely. Combine well-beaten egg and 1/4 cup milk. Make a well in flour mixture and add liquids; mix lightly with a fork, adding a little more milk, if necessary, to make a soft dough that is a little stiffer than a plain biscuit dough. Knead for 10 seconds on lightly-floured baking board; pat or roll out to 3/4 inch thickness; cut with floured 2 1/2-inch round cookie cutter. Arrange, well apart, on prepared cookie sheet; brush with milk. Bake in preheated oven 14 to 16 minutes. Split hot shortcakes and spread with butter or margarine; arrange bottom halves on individual serving plates; pile with sweetened sliced strawberries; cover with top halves of shortcakes. Top each with a spoonful of whipped cream—or with fruit and cream—and add a whole berry. Yield: 6 shortcakes.



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